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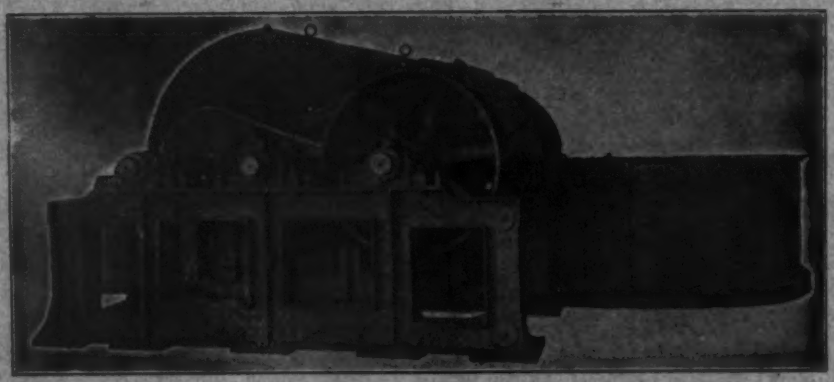

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With Which Is Combined

PAPER

Vol. LXXXII, No. 5 — Thursday, February 4, 1926

The Magazine of the Paper Industry

Canadian Paper Men Meet In Montreal

Annual Convention of the Canadian Pulp and Paper Association Is Largely Attended—L. R. Wilson of the Abitibi Power & Paper Co. Is Elected President—Premier Tuscheneau Suggests Free Entry To U. S. For All Papers In Return For Free Pulpwood From Freehold Lands

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., January 29, 1926.—The annual meeting of the Canadian Pulp and Paper Association was held at the Ritz-Carlton Hotel here today, and in point of view of attendance and optimistic reports regarding the flourishing state of the newsprint and chemical pulp branches of the industry, was by far the most notable and successful in the history of the organization. The meeting really occupied three days, the two days previous to the general meeting having been devoted to annual meetings of the different sections and to social gatherings. The general meeting was ably presided over by the retiring president, Frank W. Clarke.

L. R. Wilson, managing director and vice-president of the Abitibi Power and Paper Company, was unanimously elected president for the ensuing year. His name was proposed in his absence.

The Export of Pulpwood

Contrary to what was expected, the members did not vote on a resolution introduced by Angus McLean, of Bathurst, N. B., president of the Bathurst Company, Ltd., asking the Association to declare its approval of legislation making it compulsory to manufacture in Canada all wood cut off federal and provincial lands, which may hereafter be sold, granted or otherwise disposed of by the Crown, as a step in the direction of forest conservation; and in the event of the adoption of such legislation, pledges its best endeavors to provide an adequate market for all wood harvested from allotments made to bona fide farmers and settlers.

George Chahoon, Jr., president of the Laurentide Company, led off the discussion on this proposal, and called instead for a reaffirmation of last year's resolution, which he called "a real red-blooded motion." After considerable discussion, Mr. McLean's motion was withdrawn, and last year's resolution was reaffirmed. This resolution favored an export duty on all logs and pulpwood exported from Canada, such duty to be upon a graduated basis, increasing annually.

Col. McCormick on the Outlook

A feature of the meeting was an address at the luncheon on Friday by Col. R. R. McCormick, president of the Chicago Tribune Company and publisher of the Liberty Magazine and New York Daily News. He is also president of the Ontario Paper Company. He spoke most optimistically about the future of the newsprint industry. He showed how the modern newspaper was constantly increasing its readers by developing features of industry to all sections of society and particularly the women and children, and how this was making for larger and larger newspapers.

"There was a moment of panic in that part of my anatomy which registers emotions when the success of the radio became apparent," he said. "We have since taken over the radio, and have it as part of our institution. We find that we are reaching many people by the radio, whom we had never reached by mail or special delivery, and we believe we can use this latest method in getting more circulation for the paper. Better transportation facillities have made it possible to ship newspapers where before they could not go.

"Our newspaper has been increasing its circulation about 100,000 a year for a number of years. In New York, circulation of the old papers have been stationary for a number of years. That furnished an opportunity for some uncouth, half-educated people from Illinois to establish a newspaper called the News, which today has the largest circulation in the world next to the publication of my good friend Lord Rothermere. It shows you that where the local papers are dumb, competition will come in."

"In the human turnover," he concluded, "you will find an increased newspaper-consuming public, and you may dismiss from your apprehension the thought that any harm can come to the paper industry from stopping of immigration."

Premier Taschereau Wants Free Entry to U. S. for All Paper Newsprint as a Raw Material

The Hon. L. A. Taschereau, Premier of Quebec, was the guest of honor at the banquet given by the retiring president as the concluding function of the gathering. He said he was not pessimistic over the future of Canadian forests, but believed that with the conservation plans that were being put into effect, the forests of the Province of Quebec, at any rate, would be perpetual. He mentioned that the Provincial Government welcomes American capital and American enterprise in developing the forests, and then proceeded to put some questions to his hearers as to what should be done to protect the forests and have them an unimpaired heritage to those who would come after. New contracts entered into by the Government now provided, he said, that only eighty per cent of the annual forest production should be cut.

"Should we take a step further?" asked Hon. Mr. Taschereau. "Should we come to the conclusion that the old firms, well established here, should be protected, that too many new competitors are coming in?

"This is another problem on which we are anxious to have your opinion, on which we should have your enlightenment."

He suggested that it might be advisable in the future for the Government to dispose of timber limits in such a way that they could only be operated in ten, fifteen or twenty years, so that firms established in the province may have a reserve on which to draw in the future, at the same time protecting the future forestry needs of the province.

"I believe that we are very close to over-production," added the Premier. "I believe that new firms should not be encouraged too much, and that established firms, which have built up this province, should be protected to the fullest extent."

Turning to the question of an embargo on the export of pulpwood from private lands, he said this was a very difficult question because it dealt with private rights.

"If there is one thing which we respect in Quebec, it is private property, and private rights," he said. "To our American friends I can say this: Their rights in the province of Quebec will be respected just as much as the rights of any Canadian. It is perhaps a problem which will adjust itself alone, that of an embargo on wood. It is adjusting itself just now, because American mills are coming here now.

"But I must say to our American friends that if they want to get wealth from our private lands, they should give free entry into the United States to all grades of paper made in Canada. Our American friends, perhaps, do not know what retaliation means, but we know something about it. If Americans object to an embargo on the wood from private lands, the way to prevent such an embargo is to give free entry to all paper entering the United States from Canada. Loud cheers followed this declaration.

He concluded by what he called "an unpleasant dish," namely, the suggestion that the Government might impose a small special tax on the industry. The Government, he said, wished to promote education, both university and primary. They would be called upon shortly, very shortly, to do a little in this respect. The Government believed that the immense natural resources of the province should be called upon to help the cause of education. He assured the gathering, however, that the burden to be imposed upon them would be a light one.

Newsprint as a Raw Material

Reverting now to the annual general meeting of the Association, it may be said that the address of Frank W. Clarke, the retiring president, was a really notable review of the year's developments in the industry. One of the principal points in it was the prediction that 1926 would definitely establish Canada as the largest producer of newsprint in the world. Then there was a reference to the extraordinary impetus given to the chemical pulp industry by the manufacture of rayon, and the statement that Canada was already contributing 50% of all the pulp used for this purpose, accompanied by the suggestion that artificial wool from sulphite fiber might soon be a commercial possibility. On the question of the conservation of pulpwood in Canada he said he was at a loss to understand the opposition which had developed in the United States, as the position of those interested in paper products would be serious unless steps were taken promptly to protect the present standing forest. In this connection he offered a reminder that Canadian-made paper was a raw material for many American manufacturers of newspapers, books, periodicals and a thousand and one other finished products.

The President's Address

Frank W. Clarke, the president, in his annual address to the members, said in part:

The year 1925 saw our news print industry for the first time attain an output approximately equal to that of the United States, while 1926 will in all probability establish Canada as the largest producer of this kind of paper in the world, a position which, once attained, she is not likely to lose for a long time to come. There is a tendency on the part of some to confuse the ratio of increased production in Canada with the ratio of world production, while, as a matter of fact, the increase of news print production outside of Canada is very considerably less than the increased rate of consumption. This, I believe, accounts for the fact that the often-expressed fear of an over-production of news print has in the past not been realized. It is true that at one time during the year the demand for news print fell off somewhat, but a reaction followed during the last quarter and conditions so improved as to absorb the entire output. The immediate future offers good promise of continued absorption. It has been demonstrated more and more every day that investments in advertising space are very profitable, and with the volume of advertising now carried by the newspapers showing no signs of diminution, there is little reason to fear any immediate trouble from over-production so far as the news print mills of this country are concerned.

The manufacturers of fine papers, being largely dependent upon the Canadian market, and handicapped therein by abnormally cheap competition from abroad, have had a better year than in 1924, but their situation is still susceptible of considerable improvement. Other branches of the paper industry—wrapping papers, kraft, tissues and light weights, boards, etc.—have had a fairly satisfactory year, particularly in the final months.

Rayon Offers New Development—Wool Next?

The chemical pulp industry has benefited in a marked degree by a new industrial development of which our manufacturers have been prompt to take advantage. I refer to the remarkable success of "rayon," or what is more commonly known as artificial silk. This new fabric has a tremendous popular appeal and no doubt will be reduced in cost to a point where it will prove a strong competitor for cotton fabrics.

The manufacture on a commercial basis of artificial wool from sulphite fibre is now also being seriously considered, so that it is reasonable to assume that wood pulp will henceforth be an important source of material for beautiful and inexpensive textile fabrics.

Canada with its unequalled facilities for the production of woodpulp is already contributing about 50 per cent of all the pulp now used for this purpose and will undoubtedly keep pace with the rapid development of the new industry.

After an examination of figures showing the cotton and wool consumption of the world, coupled with the knowledge that it takes between three and four cords of wood for one ton of artificial silk, it becomes evident that the development of this new industry will make fresh demands upon our diminishing forests and impose additional obligations on those responsible for their conservation.

The situation in respect to mechanical pulp is less satisfactory, for while production has been well up to normal for the year, the market has not been such as to yield producers an adequate return.

The Pulpwood Question

The question of the maintenance of the pulpwood supply of Canada continues the outstanding problem affecting our industry. Much has been done during the past year to emphasize its importance and to attract to it the serious consideration of the Canadian people, but the question of the particular policy to be adopted is still a matter of somewhat diversified opinion.

Your executive believes that a way can and should be found to harmonize the views of our own members in the first instance, so that a united stand may be taken on this most vital question. It is to be hoped, also, that this may be achieved without entailing a misunderstanding with our fellow industrialists outside of Canada. Perhaps it would not be out of place for me to suggest that so far from being actuated by selfish motives, with the purpose of monopolizing the news print industry to the detriment of the American consumer and the embarrassment of our foreign competitors, as has been alleged, we are merely seeking a means of assuring a continuance of the supply of our raw materials at a reasonable price. Unless this can be accomplished it is quite certain that

before many years the cost of pulpwood will be very much enhanced and the price of news print with it.

Finds American Attitude Puzzling

Quite frankly, I am at a loss to understand the attitude of our friends across the border towards this very important question. Except for a few comparatively small areas, most of the spruce and balsam forest east of the Rocky Mountains in the United States has been cut out or burned out. It is difficult to realize what would have happened had the United States not been able to draw on Canada's pulpwood resources when their own had reached the point of exhaustion. The effect of our supply being available has been that they have not as yet felt the pinch as they otherwise would have done. But I would ask them to consider what their position will be, say, thirty years hence, when, unless steps are taken promptly to protect the present standing forest and provide a general scheme of reforestation, Canada's pulpwood supply east of the Rocky Mountains will, except in a few areas, also have become exhausted. Then North America will know what a pulpwood famine really means.

The consumption of wood for pulp and paper-making has been increasing by leaps and bounds. The use of wood in the manufacture of artificial silks and wool, already referred to, is bound still further to limit the life of our forests. So it behooves every man, woman and child in America, whether domiciled in the United States or in Canada, to consider and decide now whether they are going to continue to let the future take care of itself or to start paying a premium on futurity insurance on the life of the forest.

Paper an Important Raw Material

Statistics show that the increased consumption of paper has kept pace with the increased prosperity of the United States. Probably it is paper consumption that has set the pace. Surely there is some significance to this. Is it not a fact that the whole commercial and industrial fabric of America is dependent on paper, whether it be in the form of the daily, weekly or monthly publications, in the trade organ, or in the mass of post-office matter on which general business so depends today, not to mention the wrapping paper and board containers and the many other uses to which our products are now put? It is my prediction that anything that reduces the supply of paper will work to the disadvantage of our general welfare. There is too much of an inclination to look on paper as the finished product, but to the great mass of consumers it is simply a raw material used in the manufacture of newspapers, books, periodicals and a thousand and one other finished products.

We hear from time to time suggestions of the existence of other sources of paper supply, particularly European sources, but it must not be overlooked that European demand for paper is also increasing rapidly and that their exportable surplus is in a fair way of disappearing soon. Further, it is not only a matter of price; it is also one of convenience and dependability of supply that must be considered. Surely where two countries such as ours are divided merely by an imaginary line, where the people speak a common tongue, where business practices coincide, where our banking and credit arrangements ignore international boundaries, and where, finally, international amity has existed without a suggestion of disruption for over a century, there should be no question as to Canada's ability to qualify from the viewpoint of both convenience and dependability.

So, should the Dominion undertake to secure an adequate revenue from her pulpwood going abroad it might conceivably affect a few of the industries dependent on this wood and affect in turn the price of the manufactured article to some extent, but the revenues so obtained would be made available for forest protection and for fresh propagation for the ultimate benefit of the consumer, whether resident of the United States or of Canada. This, I contend, is just as much a legitimate charge on industry generally as is the fire insurance which all well-managed commercial enterprises look upon as part of their necessary overhead. It seems to me that the publishers of both Canada and the United States ought to be just as much interested in selling this idea to their public as we are of the pulp and paper industry of Canada.

Progress in Research Work

An outstanding event of the year has been the establishment of a Chair of Industrial and Cellulose Chemistry at McGill University. It has long appeared illogical that Canada, with her vast resources and her immense present and potential production of cellulose, should have to look outside of her own borders for the scientific research without which such an industry cannot successfully be developed. This anomaly has been brought to an end by the munificence of the late Mrs. E. B. Eddy and the action of the trustees of the Eddy Estate in providing the necessary financial support for the Chair. This Association has been permitted to share in this undertaking by guaranteeing an annual contribution of $7,500 for five years for the further support of the research work in this connection. The University has been highly fortunate in securing the services of Professor Harold Hibbert, D.Sc., an eminent scientist with a long record of success in this field of labor.

Another important step in connection with industrial research has been taken with regard to the Forest Products Laboratories. The program proposed at the last annual meeting by the Research Section has, thanks to Col. C. H. L. Jones and his untiring associates, been carried out in its entirety. Arrangements have been made with the Dominion Government by which the Pulp and Paper Division of the Laboratories is now operated under the joint direction of this Association, acting through the Research Section and the Government, acting through the Department of the Interior. The Association provides a minimum grant of $20,000 a year towards the upkeep of the Division, and the Division itself has been reorganized and practically re-staffed. Its work has been systematized and co-ordinated with the needs of the industry, and the results of the change are already evident.

The Executive Council has thoroughly investigated the details of both of these new enterprises, to which your Association is making so substantial a contribution, and is fully convinced that the results will far more than repay the expenditure involved. It is hoped that members will familiarize themselves with the details as presented in the report of the Research Section.

The possibilities of research investigation are unlimited and the extent to which the Section should have the financial support of the Association is a matter for the very serious consideration of the members.

Educational Developments

Substantial progress has been made in the educational work carried on in the mills by means of the text-books provided by the Joint Committee on Vocational Education and the Correspondence Course fathered by the Institute of Industrial and Domestic Arts, under the auspices of the Association. A French translation of the text-books is in course of preparation, for whose furtherance a substantial grant has been received from the Quebec Provincial Government and further financial support promised.

Conferences have taken place during the year between our representatives and the authorities responsible for conducting the Government School of Paper-Making at Three Rivers, and a visiting Board, comprised of representatives of the nearby paper mills, has been appointed.

Australian Trade Agreement

The Canadian-Australian Trade Agreement, which a year ago was still awaiting the sanction of the Canadian Parliament, was finally ratified on the last day of the 1925 session and is now in effect. It reopens to us the Australian market, closed for some years by a discriminatory tariff. Its beneficial effects have already made themselves apparent in an increased demand for Canadian paper.

The Woodlands Section

The Woodlands Section, as the report of its Chairman will show,

has experienced a year of heart-searching, and has concluded that it has outlived the form of organization under which it was first established. Steps have been taken to reconstitute it on a more practical basis, and it proposes hereafter to concern itself exclusively with logging and logging operations, with the idea of thus rendering more useful service to the industry. The executive believes that the reorganization will give good results, and heartily endorses the Section's request for financial support.

The Technical Section

The Technical Section, which has long been one of the most progressive branches of the Association, continues to function effectively. Full details of its year's activities will be found in the report of its Chairman, Mr. C. Nelson Gain. With the increasing keenness of competition in the industry the value of the work performed by this Section becomes every year more and more apparent, especially in reduced production costs effected by the introduction of improved scientific methods.

Unnecessary Imports of Paper

The question of imports of paper into Canada continues to give concern to several of our Sections. These imports, which average ten million dollars annually in value, more than offset our exports of all paper other than news print. Much of the importation is quite unnecessary and should be replaced by increased consumption of Canadian paper. Some imports, it is believed, are brought in at unduly low tariff rates by means of wrong classification and undervaluation. In an effort to check this tendency, the Executive Council has authorized the employment of a Customs Expert, whose services are now available to members.

In this connection the Produced-in-Canada campaign carried on by the Canadian Manufacturers' Association is effecting good results by educating Canadian consumers on the advantages of patronizing home industry. The campaign is receiving the practical as well as moral support of our members.

Advantages of Co-operation

The past year has again emphasized the advantages of co-operation in our industry. The Sections which have made most progress have been those which have taken occasion to hold regular periodical meetings for the discussion of trade problems and the working out of their solutions. On the other hand, where members have shown a tendency to rely solely on the organization both for initiative and performance, there have been disappointments. A trade organization can function only through the active and continuous co-operation of its members. When members stand aloof, distrustful of their fellow-members and unwilling to confer or co-operate, then the organization itself can have neither vigor nor vitality. The executive urges upon all members the desirability of devoting the coming year to the strengthening of their respective sections. This can best be done by securing a hundred-per-cent enrollment and by holding regular and fully representative meetings.

Astonishing Growth of the Industry

I cannot close without a reference to the astonishing growth which is constantly taking place in our industry. Since we last met the official census figures for 1924 have become available. To go back for the short space of six years only, we find that the capital investment in the industry has been increased 66 per cent, the production of paper (in tons) 58 per cent, and the production of pulp 44 per cent. It is gratifying to find that the consumption of pulpwood increased only 37 per cent in the same period, indicating a much more efficient utilization of our limited natural resources. We can confidently assume that the total capital investment had risen by the end of 1925 to half a billion dollars, or 81 per cent over that of 1919, some part of which will not come into operation until the present year. Our exports in 1925 amounted to $154,555,951, an increase of $15,064,482 over the preceding year, and an increase of 55 per cent over 1919. This rate of increase should be maintained for a considerable time to come, provided that we give all possible attention to efficiency not only in the production but also in the marketing of our products.

Loss of a Pioneer

The industry has lost during the year one of its oldest and most honored captains. The death of John R. Booth removed a unique survivor of the period when one man could combine in his own person the qualities of forester, lumberman, paper man, railway man, financier and many other things. We have progressed far in specialization since those days, but we must be careful lest we lose some of that wide grasp of general business which was such an asset to the pioneers of our industry and which was exemplified to such a marked degree in the career of the late Mr. Booth.

Conclusion

In conclusion, a word of appreciation is due to the members of the Executive Council as well as to the membership at large, for their support and co-operation through the year. I would like to make particular reference to the services of our Secretary and Manager, Mr. Beck, and his very efficient staff. Presidents come and presidents go, but Mr. Beck, year after year, keeps his shoulder to the wheel, and the real success of this Association is, I believe, due to him and his predecessor, Mr. Arthur L. Dawe, and their untiring efforts in building up and carrying on the work of the Association.

Reports of the Sections

Following the president's annual address, the reports of the various sections were presented by the respective chairmen.

Board Mills Have Better Year

D. F. Robertson, reporting on behalf of the Board Section, stated that the improved general conditions in the latter part of the year had revived the demand for board and enabled the mills to report a better year than was experienced in 1924.

Production for the year was a little ahead of the previous year and shipments increased in proportion, larger shipments having been made to the domestic market, while export shipments were slightly smaller.

Details on production and shipments (in tons) were:

	Production	Canadian Shipments	Export Shipments
1925	104,533	91,264	13,282
1924	98,036	84,543	13,606
1923	97,959	83,432	14,715

Prospects for the coming year were somewhat brighter than they were at the commencement of 1925.

Prices Too Low for Book and Writing Paper

H. B. Donovan, on behalf of the Book and Writing Section, reported that business, if anything, had improved, but prices had not been quite as good as they should have been to make this industry reasonably prosperous, although the immediate tendency in this respect appeared to be towards a slight improvement.

Production for 1925, compared with the two preceding years, was as follows:

	Tons 1923	Tons 1924	Tons 1925
Book	35,079	28,542	29,387
Writing	18,113	22,072	23,423

Exports amounted to 60,136 cwts. compared with 42,813 cwts. in 1924, an increase of 40%. The re-opening of the Australian market to Canadian-made paper at the same rate of duty as applies to paper imports from the United Kingdom, which was accomplished by the acceptance of the Canadian-Australian Trade Agreement, had benefited Canadian manufacturers of fine papers to some extent, and the future should show greater progress in this direction.

Some advantage was also received from the Made-in-Canada campaign carried on by the Canadian Manufacturers' Association, which was worthy of the support of the Association at large.

Notable Improvement in Chemical Pulp

F. G. Robinson, on behalf of the Sulphite Pulp Section, reported that the year had shown notable improvement in all branches of the sulphite pulp market.

For the year 1925, Canada's exports of sulphite pulp were 16 per cent greater in volume than in the corresponding period of 1924. Shipments to the United States increased by 12 per cent. and to other countries by 48 per cent. Prices on all grades were now materially higher than at this time last year.

Total tonnage of sulphite pulp shipped to U. S. A. was as follows:

	Tons
Year 1925	390,741
Year 1924	345,983

Shipments to countries other than the U. S. A.

	Tons
Year 1925	58,997
Year 1924	42,110

The market for the unbleached sulphite improved greatly during the past year and the outlook was the brightest in many years. A similar improvement had taken place in the bleached sulphite market. Extremely favorable conditions in the North American fine paper market, the marked revival in European consumption, and the increasing wood cellulose requirements of the rayon industry were the chief factors contributing to this betterment.

The outlook for 1926 was distinctly bright. Fundamental conditions were sound, warranting the utmost confidence in the future of Canada's sulphite pulp industry.

Coated Paper Prospects Better

F. H. Gage, reporting on behalf of the Coated Paper Section, said there had been an improved domestic demand for coated paper during the year, while export trade remained about the same as last year. Foreign competition had not been as keen as a year ago, indicating that the foreign mills were getting better prices in other markets.

Felt Mills Had Difficult Year

W. E. Walker, on behalf of the Felt Section, reported that during practically the whole of 1925, the manufacturers of felt paper in Canada had experienced a most difficult year, this being due to the fact that the roofing business in the United States was much more active than in Canada and prices higher. The American demand for import rags, made the price of these too high for the Canadian Mill based on what could be obtained for felt paper. They looked forward, however, to a general improvement in business during 1926.

Demand Improved for Mechanical Pulp

Large stocks of mechanical pulp were awaiting liquidation at the beginning of the year, so R. H. Bryan reported on behalf of the Mechanical Pulp Section. With the disposal of this tonnage, however, conditions showed some improvement and on the whole was much more satisfactory than it was in 1924, particularly in the second half of the year.

Water conditions in the eastern grinding districts were exceptionally good but there was a certain amount of shortage in the west which prevented an overproduction of ground-wood and helped to stabilize the market. Shipments of mechanical pulp were considerably higher in 1925 than in the previous year, the total shipments amounting to 360,205 tons compared with a total of 253,699 tons in 1924. Increased shipments were made to the United States, Great Britain and France. Although the countries of northern Europe recorded vreater exports of mechanical pulp than in the previous year, shipments from these countries to the United States were practically the same, the increased demand from the latter country having been met by the Canadian mills.

The situation at the commencement of the new year looked favorable. Stocks were very much lower at this time than was the case a year ago and with the heavy demand for paper and paperboard in the United States and Canada prospects were bright for a continued good demand for mechanical pulp.

Newsprint Mills Establish New High Record

George Chahoon, Jr., reported on behalf of the News Print Section. He said that the news print industry during the past year had operated under more favorable conditions than in the previous year and Canadian mills had again established a new high record for production. In February, for the first time, the output exceeded that of the mills in the United States and this achievement was repeated in several subsequent months. The total output for the year was 1,522,217 tons while the production of the U. S. mills amounted to 1,530,318 tons. With the new machines recently installed and others planned to come into operation during the new year, it was evident that Canada had definitely assumed the leading position in the manufacture of news print.

Several additions to the capacity of Canadian news print mills were made during the year. At the beginning of the new year the total daily capacity stood at 5,700 tons as compared with 5,130 tons at the beginning of 1925.

Consumption of news print in the United States, Canada's principal market, showed a good increase over the previous year and although the demand was somewhat slack in the first half of the year there was a decided improvement in the later months. The increased demand was sufficient to absorb the additional output and the mills were enabled to maintain operations close to capacity.

Exports of news print exceeded those for the previous year by a considerable margin, the total shipments being 1,401,655 tons, compared with 1,219,383 tons in 1924. Of this total 1,320,602 tons, or 94 per cent., went to the United States, which was an increase of 127,971 tons oevr the amount shipped to that country in 1924. It was gratifying to note that increased shipments were made to overseas countries as well as to the United States, there having been large shipments to England and to South America. In this connection the industry was to be congratulated on the successful conclusion of the trade-treaty with Australia. By the terms of this treaty Canada was placed upon an equality with England in the Australian market and Canadian mills should benefit accordingly.

Forest Products Laboratories

C. H. L. Jones reported on behalf of the Research Section of the ratification of the agreement between the Association and the Dominion Government for the joint operation of the Federal government's Forest Products Laboratories in Montreal by the government, McGill University and the Association.

Closely allied with this development was that which had taken place at McGill University by the establishment of a Chair of Industrial and Cellulose Chemistry using for this purpose the generous bequest of the late Mrs. E. B. Eddy. The appointment of Dr. Harold Hibbert to this chair had brought assurance to the Research Section that this most important phase of research work for the industry would be adequately taken care of, and the Association was supporting this work to the extent of $7500.00 annually.

On the agreement coming into effect steps were taken to fill the vacancies in the staff, and this had been done, but the two positions, Research Specialist and Experimental Specialist, which the Association inaugurated for the increase of the personnel of the Division, had proved exceedingly difficult to fill. These appointments represented the two most responsible research positions on the staff and although the whole British Empire had been covered in our search they have been unsuccessful as yet. Broadening the field of search had lately brought them into contact with some possibilities and it is probable that they would accomplish what they desired in the near future.

Summarizing the work in connection with the laboratories, Mr. Jones said:

"It is not my intention to give in detail an account of what has been accomplished by the division since the start of its operation under the Joint Administration. There are certain outstanding accomplishments, however, which I would like to mention as typifying the character of service which we are endeavoring to give to the Industry.

"The work of the Division on the Standard Freeness Testing Apparatus and its manipulation is such an example. They have superintended the design and construction of these instruments, calibrated all instruments going out to the industry, developed a proposed standard method for its manipulation, fixed the standard conditions for testing, and have developed correction factors for temperature and consistency which can be applied over a wide range of conditions to correct results to routine standard conditions. They have applied the freeness and strength tests to a great number of Canadian groundwood pulps the results of which work show clearly how wide a variation there is in our pulps when tested in a truly comparative way.

"The results of their critical analyses of such tests as 'alpha cellulose,' 'copper number', 'Baryta Resistance', has shown the futility of applying these test results without some common understanding as to the conditions to be used for the test and illustrates clearly the great need for the type of work being carried out, namely, the development of 'methods of analysis' or perhaps better 'methods of measurement' to be applied by common understanding, to our raw materials, processes and products.

"The work of the Division is distributed throughout the industry in the form of a publication entitled, "Research Notes."

An appropriation of $23,140 for the year 1926 was requested.

Technical Section's Report

C. Nelson Gain presented a lengthy report of the work of the Technical Section, dealing particularly with visits which had been paid to various mills. He made a particular point of the working of the Committee on Education, remarking in this connection:

"It is a source of satisfaction to know that the completion of the publication of Text-books has been followed by their intensive and practical use. The Committee's report shows just how valuable these text-books are proving to the industry. Those who affected to regard it as waste of time and money to attempt, as they described it, to educate a man out of his class, and to put big ideas into little heads, have been shown by the results achieved, to be somewhat short-sighted. The aim of this Committee from the first was not to put big ideas into little heads, but to help each individual in the industry, regardless of his position, to accomplish his allotted task as well as it could be done and to follow to some extent Benjamin Franklin's advice, 'empty thy purse into thy head and no man can take it from thee.' The report shows a total enrollment of 830 students with a net enrollment of 686 as of December 31st. This, it will be agreed, is a very satisfactory showing, the more so, because it is the rule with correspondence schools that not more than 25% of the students, on the average, complete the course."

Foreign Competition Hits Tissue Paper Trade

Reporting on behalf of the Tissue Paper Section, George Carruthers stated that the Canadian production of tissue in 1925 was 4,662 tons, as compared with 3,621 tons in 1924. The shipments amounted to 4,685 tons, as against 3,627 tons in the previous year.

The 1925 imports of Tissue Paper into Canada were about the same as 1924. Importations of tissue paper from foreign countries, that reap the benefit of Canada's "favored nation" treaty still caused Canadian mills considerable embarrassment, whereas the former duty on tissue was 25%, this treaty permitted a special concession of 10%, under the intermediate tariff, which was 22½% less 10%.

Taking the foregoing into consideration, together with the low wages paid in these European countries, representing as they do, about one third (1-3) of our Canadian wages, the unfairness of this competition was obvious. Under this present low tariff, one hundred (100%) per cent Canadian tissue production was impossible. Low production made costs higher than they would be, if Canadian mills were permitted to run to full capacity.

Poor Outlook for Waxed Paper

E. A. Bradshaw, on behalf of the Waxed Paper Section, reported that with prices at their present levels it was impossible to meet foreign competition in an export field.

This had been drawn very forcibly to his notice recently where it was claimed by a Canadian producer that, as the bulk of his product went to an export market, he found it cheaper to use imported waxed paper for his wrapping, because he was able to land it in Canada at very little in excess of Canadian prices and, moreover, claim a rebate of duty when his goods were exported.

A situation like this called for close cooperation on the part of the paper mills and a bettering of present prices to our industry if its growth is to be encouraged.

The domestic market was particularly cramped by the slow growth of population, further aggravated this year by the entry of two new concerns into the trade. This had naturally created a very difficult situation and had had its effect on prices. The immediate outlook was rather poor and it was hard to foresee when the present state of affairs would be corrected.

Investigation of Operating Problems

H. G. Scanche, Jr., reported, on behalf of the Woodlands Section, in favor of confining the activity of the Section to price operating problems during 1926.

There was a strong opinion in favor of engaging a thoroughly qualified engineer to carry on the work of the Section, the engineer to work under the direction of an Advisory Committee on a basis quite comparable to the plan now being used by the Research Section. A majority of the companies, however, expressed opinion that this method might better be considered for adoption for 1927.

It was therefore recommended that the incoming chairman of the Section should appoint three committees of three men each; these committees to thoroughly investigate (by means of observation trips to various logging operations and by other available means) and report in detail upon a certain number of the many problems found to be common to practically all of the Member Companies, as follows:

(1). *Committee on Transportations*:
- (a) Towing—deep and shallow water.
- (b) Flumes and Slides.
- (c) Tractor.

(2) *Committee on Administration and General.*
- (a) Contracting methods.
- (b) Methods of Reduction of Number and cost of Accidents on Logging operations.

(3) *Committee on Utilization and Protection.*
- (a) Relation of Length and Diameter of Logs to Logging Costs.
- (b) Fire Protection Methods and Equipment.

It was further recommended that the Association vote a special appropriation of $6,000, the money to be used exclusively to cover travelling expenses incidental to investigation trips made by Committee members and other minor costs incurred in the distribution of information on problems outlined.

Wrapping Paper Section

F. J. Campbell, reporting on behalf of the Wrapping Paper Section, stated volume had been steady and owing to careful handling, prices had also been reasonably steady throughout the year. Owing to the fact that a great many wrapping mills now make kraft paper, it would seem desirable to combine the two sections.

MATHIESON Chemicals

Our Complete Chlorine Service

A DECISION of far-reaching benefit to the chlorine industry was the final ruling of the Interstate Commerce Commission on the Mathieson Multiple-Unit Tank Car.

This ruling has placed the Multiple-Unit Car permanently on a tank-car basis and has thus made available to manufacturers of Liquid Chlorine and other liquefied gases a flexible and economical means of maintaining shipping and storage reserves. It will permit the general extension of our practice of accurate weighing and frequent inspection which has proven so advantageous to the consumer; it assures the carriers of two methods of transporting liquefied gases in tank cars which may be expected to increase this traffic; and it has made liquefied chlorine gas available to the consumer in containers of four sizes according to his requirements.

To-day the Mathieson Company owns and operates 120 of the special tank-cars required for transporting Liquid Chlorine, 75 of the multiple-unit type and 45 of the Class V or single-unit type, in addition to its equipment of many thousands of the two sizes of chlorine cylinders.

We thus offer, by reason of the Company's foresight and present resources, a complete service on Liquid Chlorine adapted to the consumers varying needs and to all conditions of supply and demand.

The MATHIESON ALKALI WORKS Inc.
25 WEST 43RD STREET NEW YORK CITY
PHILADELPHIA PROVIDENCE CHICAGO CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda
Liquid Chlorine-Caustic Soda
Sesquicarbonate of Soda
Bleaching Powder-Soda Ash

The mills reporting to the Association, (not including those manufacturing Kraft only) produced during the past year 26,864 tons, including Kraft 8,071 tons, Mill Wrappers 8,213 tons and Miscellaneous 10,580 tons. These totals were in each case greater than the 1924 figures when the total output amounted to 23,598 tons made up of Kraft 7,300 tons, Mill Wrappers 6,448 tons and Miscellaneous 9,830 tons.

Shipments during the year amounted to 26,583 tons as compared with 22,956 tons in the previous year, an advance of 3,627 tons or 16 per cent.

Kraft Demand Shows Improvement

Angus McLean, on behalf of the Kraft Pulp Section, reported that during the first half of the past year conditions in the Kraft pulp market were not very favorable and the mills were unable to operate at normal capacity. Towards the end of the year, however, there was a turn for the better and the general improvement in the chemical pulp situation was reflected in a greater demand for Kraft pulp and in more satisfactory prices.

Production during the year was a little greater than in the previous year, the increase being about 12 per cent; shipments also increased by a corresponding amount. Exports of sulphate pulp during the year amounted to 137,750 tons compared with 129,602 tons exported in 1924; with the exception of a small shipment to Japan, all shipments were made to the United States. Demand in the United States was somewhat larger than in the previous year and importations of European Kraft pulp increased by over 20,000 tons so that the mills were faced by keener competition on that market.

Annual Meetings of the Sections

The two days prior to the annual meeting of the Association were devoted to annual meetings of the various sections, all of which were well attended. In addition to the ordinary business, a number of special papers were contributed. For instance, in the Technical section a paper on "An Analysis of Press Felt Performance in a Modern News Mill," was read by Dr. E. A. Rees, manager of the Research department of F. C. Huyck & Sons, Kenwood Wool Products, Albany, N. Y.; a paper on "Rubber-Covered Rolls for Paper Machines," by Frederick A. Todd, manager Canadian Rubber Factory, Montreal; a paper on "A Further Discussion of the Relation between Cooking Conditions and Yield and Quality of Sulphite Woodpulp," by R. N. Miller, chemist, U. S. Forest Products Laboratory, Madison, Wis.; a paper on "America's Sulphur Supply with Relation to the Requirements of the Pulp Industry," by Dr. Raymond F. Bacon, former director of the Mellon Institute, of Pittsburgh; a paper on "Modern Soda Mill Operation, as exemplified in the plant of the Tonawanda Paper Company, Inc.," by William Cauldwell Munro, chemical engineer of that company; a paper on "Operation of the Ljungstrom Air Preheater," by C. A. Jacobson, Pulp and Paper Mill Accessories, Ltd., Montreal; a paper on "Facts and Principles of Stoker and Powdered Coal Firing which have a Direct and Practical Bearing upon the Selection of Equipment to Reduce Fuel Costs," by Joseph G. Worker, B.S., Affiliated Engineering Companies, Ltd., Montreal; a symposium on "Seasonal Variations in the Life of Paper Machine Wires," by Maurice Neilson (Belgo-Canadian Paper Co.), Edw. Flynn and R. Greig (Price Bros. & Co.), and others; a paper on "Elimination of White Water Waste with the American Continuous Filter," by John T. Hoyt, United Filters Corporation, Hazelton, Pa.; and a symposium on "The Present Status of Canada's Pulpwood Resources and the Progress of Sylviculture in the Dominion."

Rapid Depletion of Canada's Timber Supply

Roland D. Craig, of the Forest Service, Department of the Interior, Ottawa, in contributing to the discussion on the last-named subject, said that only 27 per cent of Canada's original forest wealth is left, and as the depletion of the country's forest capital had gone beyond the limit of safety, immediate rehabilitation steps must be taken.

Others who contributed to the discussion were G. C. Piche, chief of the Forest Service, Province of Quebec, and E. J. Zavitz, provincial forester, Province of Ontario.

Col. Jones on Scientific Research

Col. C. H. L. Jones, vice-president of the Spanish River Pulp and Paper Mills, Ltd., Sault Ste. Marie, Ont., and chairman of the Research Section, gave an address at a special combined meeting of the different sections. He emphasized the essential practical side of scientific research. He mentioned that professor Harold Hibbert, whom the Association had obtained for the E. B. Eddy Chair of Industrial and Cellulose Chemistry at McGill University, was able to add $25,000 a year revenue to the large company with which he was formerly engaged as the result of one line of research he carried on. The Canadian Pulp and Paper Association, he said, wanted to make Montreal the greatest center of the world of those arts that are dependent on cellulose, so that every scientist in the business would call it a wasted year unless he came here.

Prof. Hibbert Guest of Honor

Professor Hibbert was the guest of honor at a luncheon of the different sections, and was given an enthusiastic reception. He delivered an address on the relation of scientific research to the pulp and paper industry in Canada, and dealt with the avenues of research from which notable results might be expected. He emphasized the need of fundamental contributions to progress instead of adopting other people's ideas and concluded with the suggestion that both Canadian and American interests should work together so that the life blood of the industry may remain assured.

News Print Service Bureau Elects Officers

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., January 29, 1926.—A striking address on the extraordinary development of the news print industry was the feature of the meeting of the News Print Service Bureau, held in Montreal today. This address which was given by R. S. Kellogg, the secretary, said that 1925 set a new record in the news print industry, with a total North American output of 3,162,000 tons, or 9 per cent more than in 1924, and a North American consumption equal to 98 per cent of the production.

The following officers were elected for the ensuing season: President, Louis Bloch, president of the Crown Willamette Paper Company, of San Francisco, Cal.; Vice-President, Louis Armstrong, treasurer of the Laurentide Company, Ltd., of Grand Mere, Que.; and Secretary and Treasurer, Royal S. Kellogg. The executive committee was elected as follows: Chairman, Percy B. Wilson, vice-president of the Spanish River Pulp and Paper Mills, Ltd., of Sault Ste. Marie, Ont.; J. L. Apedaile, managing director of Price Bros. & Co., Ltd., of Quebec, Ont., and A. R. Graustein, president of the International Paper Company, New York.

The San Rafael News Print Mill, Mexico, and the Beaver Wood Fibre Company, Ltd., of Thorold, Ont., were elected to membership, thus completing the North American continental organization.

Strathmore Mills Enter Safety Contest

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., February 1, 1926.—The four mills of the Strathmore Paper Company have entered as individual units in the six months safety race under the auspices of the National Safety Council. Up to present writing three of the mills have a perfect record and one has lost one day.

No less than 46 paper mills have entered the race the prize for which is a large silver cup. If there is a tie at the end of the six months the contest will continue until one leads.

Paper Awards for Government Printing Office

Joint Congressional Printing Committee Meets at Washington on Monday of This Week and Makes Awards on Paper for the Year Beginning March 1, 1926, Bids for Which Were Approved Last Week—List of the Successful Bidders and Prices

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 1, 1926.—Pursuant to announcement made on January 25, the Joint Committee on Printing met today and awarded the following contracts for furnishing paper for the term of one year, beginning March 1, 1926:

STANDARD NEWS PRINT

Lot No. 1.— 40,000 lbs. Standard News Print Paper, 24x36—32 lbs. Rolls 19 inches wide, 3-inch cores, Andrew P. Mudge, Baltimore, Md., 3.74 cents.

Lot No. 2.— 2,500,000 lbs. Ditto, Rolls, 24, 36 and 48 inches wide, 3-inch cores, Bryant Pulp and Paper Company, Inc., New York City, 3.75 cents (one 24-inch roll to every two 36-inch rolls.)

MACHINE FINISH BOOK PAPER

Lot No. 3.— 400,000 lbs. Machine Finish Book paper, 25x28—35, Flat, cut 24x32, 28x38, and 31¼x45½ inches, P. H. Glatfelter Company, Spring Grove, Pa., 6.00 cents.

Lot No. 4.— 1,000,000 lbs. Ditto, Flat, Cut 24x38 and 38x48 inches, P. H. Glatfelter Company, 5.90 cents.

Lot No. 5.— 1,000,000 lbs. Ditto, P. H. Glatfelter Company, 6.00 cents.

Lot No. 6.— 2,000,000 lbs. Ditto, Rolls, 18, 19, 21, 23, and 24 inches wide (3-inch cores), P. H. Glatfelter Company, 6.00 cents.

Lot No. 7.— 1,000,000 lbs. Ditto, Rolls, 38 inches wide (3-inch cores), P. H. Glatfelter Company, 5.74 cents.

Lot No. 8.— 1,000,000 lbs. Ditto, P. H. Glatfelter Company, 5.80 cents.

Lot No. 9.— 600,000 lbs. Ditto, Rolls, 48 inches wide (3-inch cores), P. H. Glatfelter Company, 5.79 cents.

Lot No. 10.— 400,000 lbs. Ditto, 40-lbs. Rolls, 36¾ and 38 inches wide (3-inch cores), P. H. Glatfelter Company, 5.74 cents.

Lot No. 11.— 800,000 lbs. Ditto, Flat, Cut 24x38, 34¼x64, and 38x48 inches, P. H. Glatfelter Company, 5.74 cents.

Lot No. 12.— 300,000 lbs. Ditto, 50 lbs. Flat, Cut 22¼x32¼, 24x38, 24¼x36¼, 32x42, 38x48, and 41x52 inches, P. H. Glatfelter Company, 5.74 cents.

Lot. No. 13.— 15,000 lbs. Ditto, 60 and 70 pounds, Flat, cut 29x41 and 38x48 inches, P. H. Glatfelter Company, 5.74 cents.

Lot No. 14.— 25,000 lbs, Colored, Machine Finish Book Paper, Bid rejected.

MACHINE FINISH BOOK END PAPER

Lot No. 15.— 75,000 lbs. Machine-Finish Book End Paper for Waste leaves. Flat, 25x38—80, P. H. Glatfelter Company, 6.39 cents.

ANTIQUE BOOK

Lot No. 16.— 90,000 lbs. Antique Book Paper, 25x38—50, Flat cut 25x38, 29x41, and 38x50 inches. P. H. Glatfelter Company, 5.74 cents.

LIGHT WEIGHT MACHINE FINISH BOOK

Lot No. 17.— 70,000 lbs. Light Weight Machine Finish Book Paper, 25x38—30. Flat, Cut 32x48 and 38x48 inches, P. H. Glatfelter Company, 7.29 cents.

50 PER CENT RAG LIGHT WEIGHT MACHINE FINISH BOOK

Lot No. 18.— 80,000 lbs. 50 per cent Rag Light Weight Machine Finish Book Paper, 25x38—30. Flat, cut 32x48, and 38x48 inches. Lindemeyr & Harker, Baltimore, Md., 11.35 cents.

50 PER CENT RAG MACHINE FINISH BOOK

Lot No. 19.— 80,000 lbs. 50 per cent Rag Machine Finish Book Paper, basis 25x38—40. Flat, cut 32x48 inches, The Whitaker Paper Company, Baltimore, Md., 9.87 cents.

Lot No. 20.— 400,000 lbs. Ditto. Flat, cut 38x48 inches, The Whitaker Paper Company, 9.87 cents.

Lot No. 21.—100,000 lbs. Ditto, 40 and 45 lbs. Flat, cut any size minimum width 24 inch, maximum 42 inch. The Whitaker Paper Company, 9.87 cents.

SUPERCALENDERED BOOK

Lot. No. 22.— 25,000 lbs. Supercalendered Book Paper, basis 25x38—45. Flat, cut 32x48 inches, minimum order 12,500 lbs., P. H. Glatfelter Company, 6.00 cents.

Lot No. 23.— 500,000 lbs. Flat, cut 31¼x45½ inches, P. H. Glatfelter Company, 6.00 cents.

Lot No. 24.— 600,000 lbs. Ditto, Flat, cut 24x38 inches and 38x48 inches, P. H. Glatfelter Company, 6.00 cents.

Lot No. 25.— 500,000 lbs. Ditto, Rolls 38 inches wide (3-inch cores), P. H. Glatfelter Company, 6.00 cents.

Lot No. 26.— 500,000 lbs. Ditto, Rolls as above. P. H. Glatfelter Company, 6.00 cents.

Lot No. 27.— 40,000 lbs. 25x38—45 and 50. Flat, cut any size, minimum 24 inches, maximum 42 inches wide, minimum order one weight 20,000 lbs, P. H. Glatfelter Company, 6.00 cents.

50 PER CENT RAG SUPERCALENDERED BOOK

Lot No. 28.— 36,000 lbs. 50 per cent Rag, Supercalendered Book Paper, 25x38—40 and 45. Flat, cut 32x48 inches. Minimum order, one weight, 12,000 lbs. Lindemeyr & Harker, 10.95 cents.

HALF-TONE BOOK

Lot. No. 29.— 150,000 Half-Tone Book Paper, basis 25x38—70. Flat, cut 24x38 and 38x48 inches, P. H. Glatfelter Company, 6.00 cents.

SINGLE COATED BOOK

Lot No. 30.— 150,000 lbs. Single-Coated Book Paper, 25x38—70. Flat, 29x41, 38x48, and 41x52 inches, The Whitaker Paper Company, 8.13 cents.

DOUBLE COATED BOOK

Lot No. 31.—100,000 lbs. Double-Coated Book Paper, 25x38—70 and 80. Flat, cut 24x32, 24x38 and 38x48 inches. The Whitaker Paper Company, 8.59 cents.

50 PER CENT RAG DOURLE COATED BOOK

Lot No. 32.— 40,000 lbs. 50 per cent Rag, Double-Coated Book Paper, Bases as above. Flat, cut 24x38 and 38x48 inches. Minimum order one weight, 10,000 lbs., Allied Paper Mills, Kalamazoo, Mich., 12.69 cents.

GROUND WOOD MIMEOGRAPH

Lot No. 33.— 200,000 lbs. Ground Wood Mimeograph Paper, 28x38—38. Flat, cut 24½x30½, 24½x32, 24½x38, and 26x42½ inches. Lindenmeyr & Harker, 4.60 cents.
Ditto, in Wrapped Packages, 5.10 cents.

CHEMICAL WOOD MIMEOGRAPH, WHITE AND COLORED

Lot No. 34.— 1,200,000 lbs. White Chemical Wood Mimeograph Paper, 25x38—50. Flat, cut 24½x30½, 24½x32, 24½x38 and 26x42½ inches. P. H. Glatfelter Company, 5.74 cents.

Lot No. 35.— 20,000 lbs. Ditto. 70 pounds, Flat, cut 24½x32 inches, Minimum order 5,000 lbs. P. H. Glatfelter Company, 5.74 cents.

Lot No. 36.— 40,000 lbs. Colored Mimeograph Paper, Buff, Green and Pink, 25x38—50. Flat, cut 24½x30½, 24½x32, 24½x38, and 26x42½. Minimum order one color, 5,000 lbs. The Old Dominion Paper Company, Norfolk, Va., 7.34 cents, in wrapped packages, 7.59 cents.
Mimeograph Paper in Wrapped Packages, if cut to sizes 8x10½, 8x12½, 8x15 and 8½x14 inches, P. H. Glatfelter Company, 6.24 cents.

50 PER CENT RAG MIMEOGRAPH

Lot No. 37.— 1,000,000 lbs. 50 per cent White Rag Mimeograph Paper, 25x38—50. Flat, cut 24½x30½, 24½ x32, 24½x38 and 26x42½. The Whitaker Paper Company, 9.87 cents. Ditto, In Wrapped Pack-Perfect Safety Paper Company, 10.00 cents.

MACHINE FINISH LITHOGRAPH PAPER

Lot No. 38.— 60,000 lbs. Machine Finish Lithograph Paper, Bids Rejected.

50 PER CENT SUPERCALENDERED LITHOGRAPHIC PAPER

Lot No. 39.— 100,000 lbs. 50 per cent Rag, Supercalendered, Lithograph Paper, 25x38—80. Flat, cut 26x38 inches, Lindemeyr & Harker, 10.75 cents.

BLUE U. S. M. O. SAFETY WRITING, OR SENSITIVE DESIGN

Lot No. 51.— 650,000 lbs. Blue, U. S. M. O. Safety Writing Paper, No. 16, Rolls 11 and 22 inches wide. The Perfect Safety Paper Company, Holyoke, Mass, 12.12 cents.

U. S. M. O. WRITING WHITE AND BLUE

Lot No. 52.— 16,000 lbs. White & Blue, Ditto. Rolls 8½ inches. Minimum order 4,000 lbs. of either color. The Perfect Safety Paper Company, 10.00 cents.

SAFETY WRITING COLORED

Lot No. 53.— 3,000 lbs. Colored Safety Writing Paper, Blue, Grey, Green, Pink, and Salmon, No. 20. Flat, cut 17x28, 21x32, and 22x24 inches. Minimum order one color 1,000 lbs. The Perfect Safety Paper Company, 17.50 cents.

SULPHITE WRITING WHITE AND COLORED

Lot No. 54.— 25,000 lbs. White Sulphite Writing Paper, No. 13. Flat, cut 21x32 and 23x32 inches. Minimum order 5,000 lbs. International Paper Company, New York City. 7.055 cents.

Lot No. 55.—200,000 lbs. Ditto No. 16. Flat, cut 21x32, 22x34, 24x38, 26x34½ and 32x42 inches. International Paper Company, 6.305 cents.

Lot No. 56.— 700,000 lbs. Ditto No. 20, and 24. Flat, cut 17x28, 21x32, 22x34, 24x38, 28x34 and 32x42 inches. International Paper Company, 6.305 cents.

Lot No. 57.— 150,000 lbs. Ditto, No. 13, Rolls. Minimum 16 inches, maximum 24 inches in width, 3-inch cores. R. C. Osburn Paper Company, Philadelphia, Pa., 6.78 cents.

Lot No. 58.— 100,000 lbs. Ditto, No. 16, Minimum order 10,000 lbs., International Paper Company, 6.055 cents.

Lot No. 59.— 100,000 lbs. Ditto No. 20. International Paper Company, 6.055 cents.

Lot No. 60.— 50,000 lbs. Colored Sulphite Writing Paper, Blue, Buff, Green, Pink, Salmon and Yellow, No. 13. Cut 17x27, 21x32, 22x34, and 24x38 inches. Minimum order one color 50,000 lbs., International Paper Company, 8.055 cents.

Lot No. 61.— 400,000 lbs. Ditto Nos. 16 and 20. Cut as above. Minimum order one color 5,000 lbs. International Paper Company, 7.305 cents.

100 PER CENT RAG WHITE WRITING, TUB SIZED, AIR DRIED

Lot No. 62.— 5,000 lbs. 100 per cent Rag, White Writing Paper, Tub sized, Aid dried, No. 28. Flat, cut 21x32 inches. Minimum order 2,500 lbs. The Aetna Paper Company, Dayton, Ohio, 21.98 cents.

LITHOGRAPH FINISH MAP

Lot No. 63.— 10,000 lbs. Lithograph-Finish Map Paper, Nos. 16 and 20. Flat, cut 24x38, 30x40, 32x48, 36x52, and 38x48 inches. Minimum order 5,000 lbs. The Aetna Paper Company, 10.98 cents.

50 PER CENT RAG LITHOGRAPH FINISH MAP, TUB SIZED, AIR DRIED

Lot No. 64.— 160,000 lbs. 50 per cent Rag, Lithograph-Finish Map Paper, Sized and dried as above. Nos. 20, 24, and 28. Flat, cut 36x44, 36x52, 38x48, 40x62, 41x50, and 44x64 inches. The Aetna Paper Company, 13.48 cents.

75 PER CENT RAG LITHOGRAPH FINISH MAP, TUB SIZED, AIR DRIED

Lot No. 65.— 150,000 lbs. 75 per cent Ditto. Nos. 16 and 20. Tub sized, Air dried, Flat, cut 24x38, 30x40, 32x 48, 36x52, 38x48, 40x52 and 44x64 inches. Virginia Paper Company, Inc., Richmond, Va., 19.594 cents.

Lot No. 66.— 35,000 lbs. Ditto. No. 24 and 38. Flat, cut 38x44, 41x50, and 44x64 inches. Virginia Paper Company, Inc., 19.594 cents.

100 PER CENT RAG WHITE CHART PAPER, LITHOGRAPH FINISH, AIR DRIED

Lot No. 67.— 250,000 lbs. 100 per cent Rag White Chart Paper, Lithograph Finish, Tub Size, Air Dried, No. 48. Flat, cut any size. Minimum width 24, Maximum width 46 inches. R. P. Andrews Paper Company, Washington, D. C., 26.67 cents

SULPHITE MANIFOLD, WHITE AND COLORED

Lot No. 68.— 100,000 lbs. White Sulphite Manifold Paper, No. 9. Flat, cut 17x28, 19x24, 21x32, and 22x34 inches. The R. A. Cauthorne Paper Company, Richmond, Va., 10.74 cents.

Lot No. 69.— 60,000 lbs. Colored Ditto, Blue, Buff, Green, Pink, Salmon and Yellow, No. 9. Cut as above. Minimum order one color 5,000 lbs. R. P. Andrews Paper Company, 11.80 cents.

50 PER CENT RAG MANIFOLD, WHITE AND COLORED

Lot No. 70.— 50,000 lbs. 50 per cent Rag, Manifold White, No. 7. Flat; cut 17x28, 19x24, 21x32 and 22x34, Minimum order 5,000 lbs. Arthur P. Mudge, Baltimore, Md., 20.89 cents.

Lot No. 71.— 40,000 lbs. Ditto, No. 9. Cut as above. Arthur 18.28 cents.

Lot No. 72.— 30,000 lbs. Ditto, Colored, Blue, Buff, Green, Pink, Salmon and Yellow, No. 7. Flat, cut 17x28, 19x24, 21x32 and 22x34 inches. Minimum order one color 3,000 lbs. Arthur P. Mudge, 23.48 cents.

Lot No. 73.— 60,000 lbs. Ditto No. 9. Cut 17x28, 21x32, 22x34 and 24x38 inches. Minimum 5,000 lbs. Arthur P. Mudge, 18.38 cents.

Roll Call of Mills Using Two or More Vickery Felt Conditioners

Number of Vickery Felt Conditioners in Operation	
Albemarle Paper Mfg. Co.	5
Allied Paper Mills	6
Alton Boxboard & Paper Co.	2
American Writing Paper Co.	3
Beckett Paper Co.	2
Bergstrom Paper Co.	2
Bird & Son, Inc.	4
Champion Coated Paper Co	18
Champion Fibre Company	2
Champion International Co.	2
Champion Paper Company	2
Cherry River Paper Company	2
Cliff Paper Company	4
Continental Paper & Bag Mills Corp	2
Crocker, Burbank Company	3
DeGrasse Paper Company	2
Eastern Mfg. Company	6
Falulah Paper Co.	5
Fitchburg Paper Co.	8
P. H. Glatfelter Co.	6
Hammermill Paper Co.	3
High Falls Pulp & Paper Co.	2
Howard Paper Co.	2
International Paper Co.	2
Jessup & Moore Paper Co.	2
Kalamazoo Vegetable Parchment Co.	2
Kieckhefer Container Co.	2
Louisiana Pulp & Paper Co.	4
Lowe Paper Company	3
Miami Paper Company	8
Nashua River Paper Co.	2
National Paper Products Company	3
Nekoosa Edwards Paper Company	5
New Haven Pulp & Board Company	2
Oxford Paper Company	10
Paterson Parchment Co	3
St. George Paper Co.	2
St. Regis Paper Co.	3
Tileston & Hollingsworth Company	4
United States Gypsum Company	2
Warren Mfg. Company	3
S. D. Warren Company	7
Washington Pulp & Paper Co.	3
West End Paper Co.	2
West Virginia Pulp & Paper Co.	24

This list of users of the Vickery Felt Conditioner, including mills of all types, is satisfying proof of its widespread application.

The fact that over 50 per cent of the Vickery Felt Conditioners in operation represent repeat orders is convincing evidence of its value.

If your mill is not included in this Roll Call, we would welcome the opportunity to show you what Vickery Felt Conditioners can do when applied to *your* machines.

May we hear from you?

VICKERY

Felt Conditioner

BIRD MACHINE COMPANY
South Walpole
Massachusetts

BIRD MACHINERY

100 Per Cent Manifold White and Colored, Tub Sized, Air Dried

Lot No. 74.— 50,000 lbs. 100 per cent Rag, White Manifold Paper, Tub-Size, Air Dried, No. 7, Flat cut 17x28, 19x24, 21x32, and 22x34 inches. Minimum order 5,000 lbs. Esleeck Manufacturing Company, Turners Falls, Mass., 41.00 cents.

Lot No. 75.— 20,000 lbs. Ditto No. 9. Cut as above. Minimum order 5,000 lbs. The Old Dominion Paper Company, 33.84 cents.

Lot No. 76.— 20,000 lbs. Ditto Colored No. 7 Cut as above. Minimum order one color 3,000 lbs. Esleeck Manufacturing Company, 42.00 cents.

Lot No. 77.— 25,000 lbs. Ditto, No. 9 Flat, cut 17x28, 21x32, 22x34 and 24x38 inches. Minimum order one color 5,000 lbs. The Old Dominion Paper Company, 34.99 cents.

50 Per Cent Rag White Glazed Manifold

Lot No. 78.— 60,000 lbs. 50 per cent Rag. White Glazed Manifold No. 8, Flat, cut 19x24 and 21x32 inches, Minimum order 10,000 lbs. Arthur P. Mudge, 23.69 cents.

Sulphite Bond White and Colored

Lot No. 101.— 25,000 lbs. White Sulphite Bond Paper No. 13. Flat, cut any size, minimum width 17 inches maximum 32 inches. Minimum order 5,000 lbs., R. C. Osburn Paper Company, 7.74 cents.

Lot No. 102.— 500,000 Ditto, Nos. 16 and 20. Flat cut as above. International Paper Company, 7.315 cents.

Lot No. 103.— 10,000 lbs. Ditto, No. 24. Flat, cut as above. Minimum order 5,000 lbs. International Paper Company, 7.315 cents.

Lot No. 104.— 50,000 lbs. Colored Ditto, Nos. 16 and 20, Flat, cut as above. Minimum order one color, 5,000 lbs., International Paper Company, 8.315 cents.

Lot No. 105.— 10,000 lbs. Ditto, No. 24. Flat, cut as above. Minimum order, one color, 2,000 lbs. International Paper Company, 8.315 cents.

30 Per Cent Rag Bond, White and Colored, Tub Sized, Air Dried

Lot No. 106.— 100,000 30 per cent Rag White Bond Paper, Tub Sized, Air-Dried, No. 13. Flat, cut 21x32, 23x36, 24x38 and 28x34 inches. The Aetna Paper Company, 13.38 cents.

Lot No. 107.— 700,000 lbs. Ditto, No. 16, Flat, cut any size, minimum 17 maximum 32 inches. The Aetna Paper Company, 10.78 cents.

Lot No. 108.— 100,000 lbs. Ditto, No. 16 Flat, cut 22¼x31½ inches. The Aetna Paper Company, 10.78 cents.

Lot No. 109.— 800,000 lbs. Ditto, No. 20. Flat, cut any size, minimum 17, maximum 32 inches. The Aetna Paper Company, 10.68 cents.

Lot No. 110.— 800,000 lbs. Ditto No. 20. Flat as above. The Aetna Paper Company, 10.68 cents.

Lot No. 111.— 1,000,000 lbs. Ditto. No. 24. Flat as above. The Aetna Paper Company, 10.48 cents.

Lot No. 112.— 40,000 lbs. Ditto Colored No. 13. Flat as above. Minimum 3,000 lbs. Sidney W. Willson, Receiver American Writing Paper Company, Holyoke, Mass., 16.76 cents.

Lot No. 113.— 250,000 lbs. Ditto, No. 16. Flat as above. The Barton, Duer & Koch Paper Company, Baltimore, Md., 12.35 cents.

Lot No. 114.— 450,000 lbs. Ditto No. 20. Flat as above. The Barton, Duer & Koch Paper Co., 12.35 cents. cents.

Lot No. 115.— 300,000 lbs. Ditto No. 24, Flat as above. The Aetna Paper Company, 12.38 cents.

50 Per Cent Rag Bond, White and Colored, Tub Sized, Air Dried

Lot No. 116.— 50,000 lbs. 50 per cent Rag White Bond Paper, Tub Sized, air dried, No. 13. Flat, cut 21x32, 23x36, 24x38 and 28x34 inches. Sidney L. Willson, 16.61 cents.

Lot No. 117.— 650,000 lbs. Ditto No. 61 and 20 Flat, cut any size minimum 17, maximum 32 inches. The Aetna Paper Company, 13.88 cents.

Lot No. 118.— 50,000 lbs. Ditto No. 34, Cut as above. The Aetna Paper Company, 13.88 cents.

Lot No. 119.— 15,000 lbs. Ditto, Colored, Nos. 16 and 20. Flat, Cut as above, Minimum order one color, 2,500 lbs: R. P. Andrews Paper Co., 17.00 cents.

75 Per Cent Rag White Bond, Tub Sized, Air Dried

Lot No. 120.—5,000 lbs. 75 per cent Rag White Bond Paper, Tub-sized, Air-Dried, No. 13. Flat, cut any size, minimum 17, maximum 32 inches. Minimum order 2,500 lbs.: Virginia Paper Company, 25.33 cents.

Lot No. 121.— 10,000 lbs. Ditto, Nos. 16, 20 and 24, cut as above, Minimum order 2,500 lbs.: Virginia Paper Company, 20.58 cents.

100 Per Cent Rag White Bond, Tub Sized, Air Dried

Lot No. 122.— 15,000 lbs. 100 per cent Rag White Bond, Tub-sized, Air-dried, Nos. 16 and 20. Flat, cut as above, minimum order one substance, 2,000 lbs.: R. P. Andrews Paper Co., 34.00 cents.

Lot No. 123.— 15,000 lbs. Ditto, No. 24, Flat, as above. R. P. Andrews Paper Company, 34.00 cents.

Declaration Bond

Lot No. 124.— 9,000 lbs. Declaration Bond, Tub-sized, Air-dried, Nos. 16 and 20. Flat, 17x22, and 22x25½ inches, Minimum order, one substance, 3,000 lbs.: The Barton, Duer & Koch Paper Co., 38.00 cents.

Parchment Deed, Tub Sized, Air Dried

Lot No. 125.— 4,000 lbs. Parchment Deed Paper, Tub-Sized, Air-Dried, No. 32, Flat, Cut 33x34 inches, Minimum order 2,000 lbs. The Barton, Duer & Koch Paper Company, 31.50 cents.

Sulphite Ledger, White and Colored

Lot No. 151.— 25,000 lbs. White Sulphite Ledger Paper, Nos. 28 and 32. Flat, cut any size, minimum 17 maximum width 32 inches; minimum order, one substance, 5,000 lbs.: The Aetna Paper Co., 8.18 cents.

Lot No. 152.— 25,000 lbs., Ditto, Nos. 40 and 48, Flat, as above: Arthur P. Mudge, 8.31 cents.

Lot No. 153.— 10,000 lbs. Colored Sulphite Ledger Paper, blue, buff, green, pink, salmon and yellow. Nos. 40 and 48. Flat, cut any size, minimum and maximum as above: Minimum order, one substance, one color: 2,000 lbs.: Virginia Paper Co., 10.23 cents.

50 Per Cent Rag Ledger, White and Colored, Tub Sized Air Dried

Lot No. 154.— 120,000 lbs, 50 per cent Rag White Ledger Paper, Tub-sized, Air-dried Nos. 24 and 28. Flat, Cut 18½x36, 18½x40½, 20x28, 21x32, 24x38, 28x29, and 28x34 inches. Minimum order, one substance, 5,000 lbs.: The Aetna Paper Company, 14.38 cents.

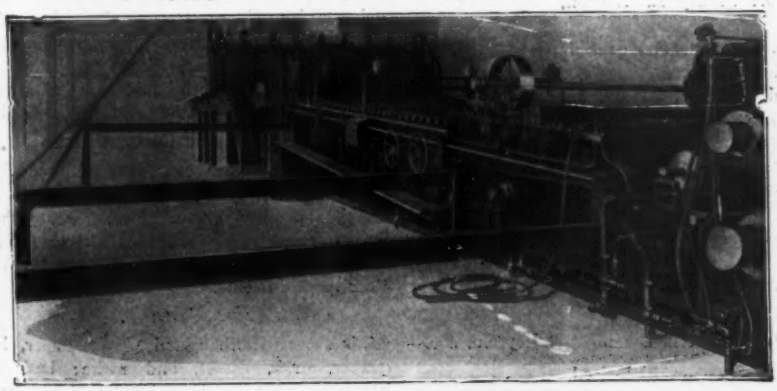
Lot No. 155.— 30,000 lbs. ditto, No. 32; Flat, cut 21x32 and 23x36 inches. Minimum order, 5,000 lbs.: The Aena Paper Company, 14.38 cents.

Idle time takes its TOLL

1/5 of Industry's Pay Roll Wasted!

THE committee of 17 appointed by Herbert Hoover to study preventable wastes in major industries for the Federated American Engineering Societies, reports that 2 billion dollars of the country's 10 billion dollar pay roll is paid out for idle time. Here is a stupendous waste, a great part of which is borne by the paper making industry. It is preventable waste, for a large part of it is due to **time out for repairs of machinery.**

Your machinery as well as your man power is on your pay roll. Isn't it the essence of economy to do away with obsolete equipment and fortify yourself to cope on equal terms with all competitors by eliminating this huge waste in man power, idle time and unproductive hours?



Foresighted mill men have found in the NEW BELOIT FOURDRINIER a happy solution for these vexing problems. It will pay you to get the facts.

Let us send you Bulletin No. 9.

The NEW BELOIT FOURDRINIER

Beloit Iron Works **Beloit, Wis., U. S. A.**

Since 1858 Builders of Paper, Board Mill and Container Plant Machinery

Lot No. 156.— 40,000 lbs. Ditto, Nos. 36 and 40. Flat, cut 20x28, 21x32, 24x38 and 38x44 inches: The Aetna Paper Company, 14.38 cents.

Lot No. 157.— 50,000 lbs. Ditto, No. 48, Flat, cut 21x32½ inches, Minimum Order, 5,000 lbs.: Sidney L. Willson, Receiver, 14.67 cents.

Lot No. 158.— 10,000 lbs. Ditto, No. 60, as above: Sidney L. Willson, Receiver, 14.67 cents.

Lot No. 159.— 70,000 lbs. Colored Ditto, Nos. 28, 32 and 36. Flat, cut 17x28, 18½x36, 18½x40¼, 19x24, 21x32, and 23x36. Minimum order, one substance, one color, 3,000 lbs.: Virginia Paper Co., Inc., 16.50 cents.

Lot No. 160.— 30,000 lbs. Ditto, Colored, No. 48. Flat, cut 21x32½, Minimum order, one color, 4,000 lbs.: Virginia Paper Company, Inc., 16.50 cents.

Lot No. 161.—10,000 lbs. Ditto, No. 60. Cut as above, minimum order, one color, 2,500 lbs.: Sidney L. Wilson, Receiver, 20.75 cents.

75 PER CENT RAG LEDGER, WHITE AND COLORED, TUB SIZED, AIR DRIED

Lot No. 162.— 65,000 lbs. 75 per cent Rag White Ledger Paper, Tub-sized, Air-dried. Nos. 24 and 28. Flat, cut 21x32, 24x38, 28x29 and 28x34. Minimum order, one substance, 5,000 lbs.: Sidney L. Willson, Receiver, 19.16 cents.

Lot No. 163.— 75,000 lbs. Ditto, No. 32. Flat, cut 21x32, 23x36, 24x38, and 28x34. Minimum order, 5,000 lbs.: Sidney L. Willson, Receiver: 19.16 cents.

Lot No. 164.— 50,000 lbs. Ditto, Nos. 36 and 40. Flat, cut 20x28, 21x32, 24x38, and 28x34 inches. Minimum order, one substance, 5,000 lbs., Sidney L. Willson, Receiver: 19.16 cents.

Lot No. 165.—20,000 lbs. Ditto, No. 48. Flat, cut 21x32½ inches. Minimum Order, 5,000 lbs.: Sidney L. Willson, Receiver, 19.16 cents.

Lot No. 165.—20,000 lbs. Ditto, No. 48. Flat, cut 21x32½ inches. Minimum order, 5,000 lbs.: Sidney L. Willson, Receiver, 19.16 cents.

Lot No. 166.— 10,000 lbs. Ditto, No. 60. Flat, as above: Sidney L. Willson, Receiver, 19.16 cents.

Lot No. 167.— 55,000 lbs. Ditto, Colored, Nos. 28, 32 and 36. Flat, cut 17x28, 19x24, 21x32, and 23x36 inches. Minimum order, one color, one substance, 3,000 lbs.: Arthur P. Mudge, 20.12 cents.

Lot No. 168.— 20,000 lbs. Ditto, No. 48. Flat, cut 21x32½ inches. Minimum order, one color, 4,000 lbs.: Arthur P. Mudge, 20.12 cents.

Lot No. 169.— 15,000 lbs. Ditto, No. 60, Flat as above. Minimum order, 1 color, 3,000 lbs.: Sidney L. Willson, Receiver, 25.30 cents.

100 PER CENT RAG WHITE LEDGER, TUB SIZED, AIR DRIED

Lot No. 170.— 40,000 lbs. 100 White Ledger Paper, Tub-sized, Air-dried, No. 24. Flat, cut 21x32, 22¾x31½, 23x36, 24x38 and 28x34 inches. Minimum order 5,000 lbs.: Arthur P. Mudge, 28.64 cents.

Lot No. 171.— 25,000 lbs. Ditto, No. 28. Flat, cut 20x28, 21x32, 23x36, 24x38, and 28x34 inches. Minimum order 5,000 lbs.: Arthur P. Mudge, 28.64 cents.

Lot No. 172.— 40,000 lbs. Ditto, No. 32. Flat, cut 17x28, 18½x42, 21x32, and 23x36 inches. Minimum order 5,000 lbs.: Arthur P. Mudge, 28.64 cents.

Lot No. 173.— 20,000 lbs. Ditto, No. 36. Flat, cut 17x28, 20x28, 21x32 and 24x38 inches. Minimum order 5,000 lbs.: Arthur P. Mudge, 28.64 cents.

Lot No. 174.— 8,000 lbs. Ditto, No. 40. Flat, cut 21x32½ and 21x42. Minimum order 4,000 lbs.: Arthur P. Mudge, 28.64 cents.

Lot No. 175.— 15,000 lbs. Ditto, No. 48. Flat, cut as above: Arthur P. Mudge, 28.64 cents.

100 PER CENT RAG WHITE HEAVY LEDGER, SINGLE PLY, TUB SIZED, AIR DRIED

Lot No. 176.— 70,000 lbs. 100 per cent Rag White Heavy Ledger Paper, Single-ply, Tub-sized, Air-dried, No. 60. Flat, cut 20½x30½, and 21x32½. Sidney L. Willson, Receiver, 28.12 cents.

WHITE TISSUE

Lot No. 177.— 7,000 lbs. White Tissue Paper, Flat, 21x32—9, minimum order, 1,000 lbs.: Mathers-Lamm Paper Company, Washington, D. C., 12.20 cents.

FACING STEREO TISSUE

Lot No. 178.— 800 lbs. Facing Stereo Tissue Paper. Flat 19x24—4½. Minimum order 400 lbs.: The R. A. Cauthorne Paper Company, 78.34 cents.

COATED COVER, COLORED

Lot No. 201.— 140,000 lbs. Coated Colored Cover Paper india tint, lighting green, and primrose. Flat, 26½x41—104: The Whitaker Paper Company, 8.48 cents.

SULPHITE MACHINE FINISH COVER, COLORED

Lot No. 202.— 20,000 lbs. Sulphite Machine Finish Cover Paper, Blue, Brown, Granite, Green, tea and yellow, basis 20x36 inches 50 lbs. Flat, cut 20x25 inches and 33x46 inches in wrapped bundles with projecting colored-paper marker between each 500 sheets. Minimum order 1 color, 2,500 lbs.: Sidnew L. Willson, Receiver, 7.87 cents.

25 PER CENT RAG MACHINE FINISHED COVER, COLORED

Lot No. 203.— 10,000 lbs. 25 per cent Rag Colored Antique Machine-Finish Cover Paper, Quaker drab, Robin's egg, and terra cotta. Flat, cut 20x25 inches, 48 lbs., marked as above: Minimum as above: Sidney L. Willson, Receiver, 7.75 cents.

Lot No. 204.— 90,000 lbs. 25 per cent Rag Colored Smooth Machine-Finish Cover Paper, dark blue, brown, granite, green, pink, tea and yellow; basis 20x26 inches, 50 lbs. Flat, Cut 20x25 and 33x46; wrapped as above, Minimum order 5,000 pounds, one color: Sidney L. Willson, Receiver, 7.75 cents.

50 PER CENT RAG ANTIQUE COVER, COLORED

Lot No. 205.— 100,000 lbs. 50 per cent Rag Colored Antique Cover Paper, dawn, sage, goblin blue, suede, khaki, and moss green. Flat, 20x25 inches, 48 lbs., wrapped and marked as above. Minimum order, one color, 5,000 lbs.: Sidney L. Willson, Receiver, 8.16 cents.

CLOTH LINED COVER

Lot No. 206.— 1,000 sheets Cloth Lined Cover Paper, brown, quaker, drab, russet, and white; basis 20x26 inches, 65 pounds. Flat, cut 20x25 inches: Bids rejected.

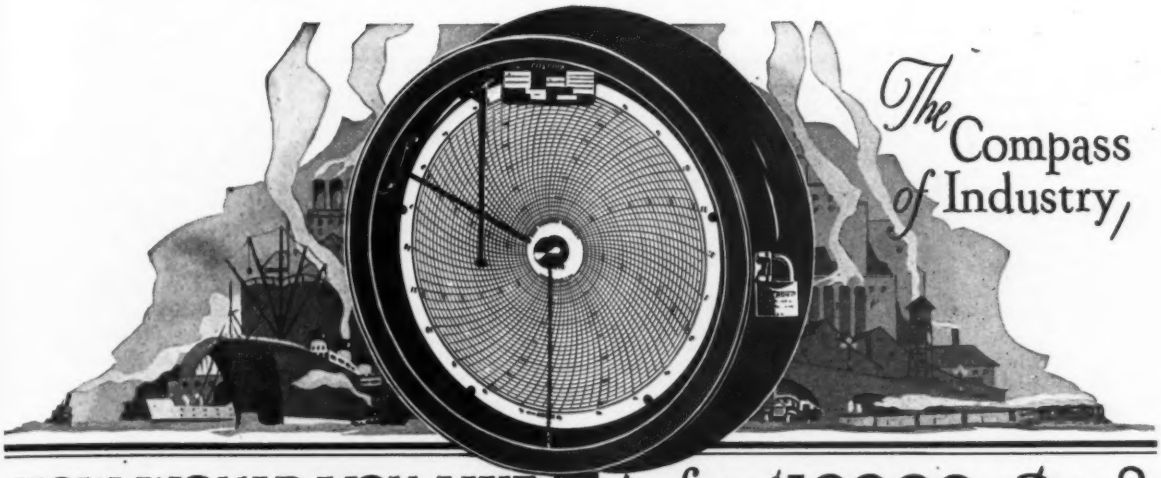
Lot No. 207.— 4,000 lbs. Ditto, Flat, cut 21x32 inches: Bids rejected.

Lot No. 208.— 6,000 lbs. Ditto, Flat, cut 24x36 inches: Bids rejected.

WOOD MANILA WRAPPING

Lot No. 209.— 170,000 lbs. Wood Manila Paper, 24x36—30 to 60. Flat, cut 21x32 and 25x38 inches, in wrapped bundles, as above: R. P. Andrews Paper Company, 4.29 cents.

Lot No. 210.— 400,000 lbs. Ditto, Rolls, 9, 18, 21 and 27½ inches wide, 3-inch cores; except 9-inch rolls which shall be wound on wooden plugs, 1½-inch hole: R. P. Andrews Paper Company, 4.29 cents.



The Compass of Industry

HOW WOULD YOU LIKE to Save $500.00 a Day?

Increased Production Between 8% and 10%

A large Meat Packing Plant increased production between 8 and 10 per cent on a ham and sausage cooker after installing a Foxboro Automatic Temperature Controller. This instrument also saves one man's time three days a week. That's only one case. Read on.

How Would You Like to Save $500.00 a Day?

Fifteen gallons of gasoline per ton of wood treated was the best figure a well-known Steam Distillation Turpentine Plant could approach. Instrument control has reduced the amount of gasoline consumed to 5 gallons, a saving of 10 gallons of gasoline per ton of wood treated, or $500.00 a day.

Investment Paid for in Three Weeks—Annual Saving of $2000.00

One of the largest New England Dairies has installed Foxboro Recording Thermometers in the pasteurizing department. The superintendent reports that the instruments saved enough steam to pay for themselves the first three weeks they were installed. Annual savings are estimated at $2000.00 to $3000.00

HERE are a few typical examples of what Foxboro Instruments for indicating, recording and controlling temperature, pressure and humidity are doing for thousands of manufacturers of automobiles, bakery goods, beverages, chemicals, candy, canned goods, clay products, dairy products, electrical products, food, gas, hardware, ice cream, laundries, linoleum, lumber products, meats, paper, paints, printing, ice, rubber, leather, textiles, soap, wire goods, wood working and in power plants, hospitals, office buildings, hotels and the great public utilities of the country.

No matter what your business is—if temperature, pressure or humidity enter into any of your operations you cannot get along without these accurate, dependable instruments built to establish a higher standard of quality.

The reason is simple. No engineer or production manager can improve conditions in his plant until he knows what they are. Foxboro Instruments show exactly what the conditions are from minute to minute, day to day, year in and year out.

Foxboro Instruments are Compasses of Industry. They chart conditions. Upon them depends the efficiency of your plant. Their use will mean increased production, lowered manufacturing costs, savings in man power and materials, elimination of waste, reduced fuel expense in your plant, just as they have to thousands of other manufacturers.

What is your problem? Write fully. Your case will be given individual attention. Foxboro engineers are located at strategic industrial centers throughout the country and can get in touch with you immediately.

THE FOXBORO CO., Inc.

Neponset Avenue, Foxboro, Mass., U. S. A.

New York Chicago Boston Philadelphia Pittsburgh
Cleveland Rochester Tulsa Atlanta
Los Angeles San Francisco Portland, Ore.

Peacock Brothers, Limited, 1605 Delorimier Avenue, Montreal, Canada
Sole British Representatives: Walker-Crosweller & Co.
66 Dane's Inn House, Strand, London, W.C.2.

Can You Beat This Manufacturer's Record?

A Foxboro Recording Thermometer installed on a brine cooler in the plant of a nationally known Chocolate Manufacturer saves from 40 to 90 minutes a day of one man's time. The time saved plus the improvement in cooler operation pays for the installation many times during the year.

Save One Man's Time

A large Pennsylvania Heating Company had always employed one man exclusively while testing condensation meters on consumer lines. Several Foxboro Flow Meters now do this work. Tests are much more accurate. Also these Meters save one man's time at 50 cents an hour.

Checked Waste and Saved $1500.00

A middle western Metal Bed Manufacturer installed a Foxboro Recording Thermometer on a paint baking kiln. A painter put in some beds and forgot to close the door. The watchman, seeing the drop in temperature on the Foxboro Chart, shut the door and saved the beds—a saving of $1500.00. This same Foxboro Thermometer has saved thousands of dollars.

FOXBORO

REG. U. S. PAT. OFF.

INDICATING, RECORDING, CONTROLLING INSTRUMENTS
FOR TEMPERATURE, PRESSURE AND HUMIDITY

SULPHITE MANILA WRAPPING

Lot No. 211.— 80,000 lbs. Sulphite Manila Paper; bases, 24x36—50 to 80. Flat, cut any size, in wrapped bundles, with projecting colored paper marker between each 500 sheets: The R. A. Cauthorne Paper Company, 6.46 cents.

Lot No. 212.— 18,000 lbs. Ditto, 70 lbs. Rolls, 11½ inches wide, wound on wooden plugs, 1½ inch hole. Minimum order 5,000 lbs.: Sidney L. Willson, Receiver, 6.54 cents.

No. 2 KRAFT WRAPPING

Lot No. 213.— 200,000 lbs. No. 2 Kraft Wrapping Paper, 24x36—30 to 80. Flat, cut any size, in wrapped bundles of 500 sheets each: Reese & Reese, Baltimore, Md., 5.365 cents, in carload lots.

Lot No. 214.— 350,000 lbs. Ditto, Cut any size, folded, in wrapped bundles of 500 sheets each: Reese & Reese, 5.365 cents in carload lots.

Lot No. 215.— 80,000 lbs. Ditto, Rolls, 24, 36, 39 and 48 inches wide, wound on wooden plugs, 1½ inch hole, except that the 39-inch rolls are to be wound on 3-inch iron cores. The Whitaler Paper Company, 5.37 cents.

No. 1 KRAFT WRAPPING

Lot No. 216.— 50,000 lbs. No. 1 Kraft Paper, 24x36—60 and 80. Flat, cut any size, in wrapped bundles of 500 sheets each: The Whitaker Paper Company, 6.04 cents.

ROPE MANILA

Lot No. 217.— 10,000 lbs. Rope Manila Paper, 24x36—60. Flat, cut 24x36, 24x38, 27x38, 36x48, and 40x42 inches, in wrapped bundles of 500 sheets each. Minimum order, 5,000 lbs.: Virginia Paper Company, Inc., 10.7591 cents.

Lot No. 218.— 10,000 lbs. Ditto, 70 lbs. Flat, cut 24x36, 24x38, and 36x48 inches, wrapped as above. Minimum order 5,000 lbs.: Virginia Paper Company, Inc., 10.7591 cents.

Lot No. 219.— 10,000 lbs. Ditto, 80 lbs. Flat, cut 24x36, 27x38, 33x33, 36x48, and 38x38 inches. Wrapped as above. Minimum order 5,000 lbs.: Virginia Paper Company, Inc., 10.7591 cents.

Lot No. 220.— 50,000 lbs. Ditto, 140 lbs. Flat, cut 24x36 and 24x38 inches, wrapped as above. Minimum Order, 10,000 lbs.: Virginia Paper Company, Inc., 10.74 cents.

HIGH FINISH SULPHITE MANILA TAG BOARD

Lot No. 221.— 175,000 lbs. High-Finish Sulphite Manila Tag Board; basis 24x36 inches, 80 to 140 lbs. Flat, cut any size, minimum 24, maximum 38 inches wide, in wrapped bundles of 500 sheets each: Port Huron Sulphite and Paper Company, Port Huron, Mich., 6.50 cents.

Lot No. 222.— 60,000 lbs. Ditto, 80 lbs. Rolls 18 inches wide, cores 3-inch: Port Huron Sulphite and Paper Company, 6.50 cents.

WOOD MANILA TAG BOARD

Lot No. 223.— 50,000 lbs. Wood Manila Tag Board; 22½x28½—75. Rolls, 21¾ inches wide, 6-inch cores: R. P. Andrews Paper Company, 4.34 cents.

CALENDERED TAG BOARD MANILA AND COLORED

Lot No. 224.—300,000 lbs. Manila Calendered Tag Board; 22½x28½—approximately 75. Rolls 24x26¾ inches, 6-inch cores: The R. A. Cauthorne Paper Company, 6.73 cents.

Lot No. 225.— 8,000 lbs. Colored Calendered Tag Board, blue, brown, green, manila, pink and salmon; 22½x28½ in.; approximately 75; minimum thickness .0060 inch; maximum .0068 inch; Rolls 24 and 26¾ inches wide (6-inch cores). Minimum order, one color, 2,000 lbs. R. P. Andrews Paper Company, 8.20 cents.

JUTE TAG BOARD

Lot No. 226.— 75,000 lbs. Jute Tag Board; 22½x28½ in., 100 to 140. Flat, cut any size, minimum 22 inches, maximum width 32 inches, in wrapped bundles of 500 sheets. Minimum order, one weight, 5,000 lbs. Virginia Paper Company, 9.289 cents.

MANILA CARDBOARD

Lot No. 301.— 20,000 lbs. Manila Cardboard, 22x28 in., 116, 134 and 196 lbs. Flat, cut 17x28, 21x32, and 22½x28½ inches, in wrapped bundles of 500 sheets each, with projecting colored paper marker between each 100 sheets. Minimum order, 1 weight, 3,000 lbs.. Arthur P. Mudge, 5.58 cents.

RAILROAD BOARD, WHITE AND COLORED

Lot No. 302.— 70,000 sheets White Railroad Board, Flat, 22x28, 4 ply, each 100 sheets fully banded, packed in wooden cases. Minimum order, 5,000 sheets. The Whitaker Paper Company, $17.25 per 1000 sheets.

Lot No. 303.— 10,000 sheets Ditto, 8-ply; wrapped as above, Minimum order 5,000 sheets. The Whitaker Paper Company, $27.50 per 11,000 sheets.

Lot No. 304.— 15,000 sheets Ditto, 14 ply, each 50 sheets fully banded, packed in wooden cases. Minimum order 5,000 sheets. Arthur P. Mudge, $70.12 per thousand.

Lot No. 305.— 120,000 sheets colored Railroad Board, ash gray, blue, buff, green, lemon and orange. Flat, 22x28 inches, 4 ply; each 100 sheets fully banded, packed in wooden cases. Minimum order 1 color, 5,000 sheets. United Paper Board Company, $33.50 per 1000 sheets.

WOOD BRISTOL BOARD, COLORED

Lot. No. 306.— 350,000 lbs. Colored Wood Bristol Board, buff, blue, gray, green, melon, pink, quaker drab, and yellow. Flat, 21x31 inches, 102 lbs., in wrapped bundles of 500 sheets each, with projecting colored paper marker between each 100 sheets. The Old Dominion Paper Co., 4.979 cents.

Not No. 307.— 350,000 lbs. Ditto; 22½x28½ in., 100. Rolls 20-inches wide; 6-inch cores. The Whitaker Paper Company, 5.13 cents.

Lot No. 308.— 350,000 lbs. Ditto. The Whitaker Paper Company, 5.13 cents.

U. S. POSTAL CARD BRISTOL

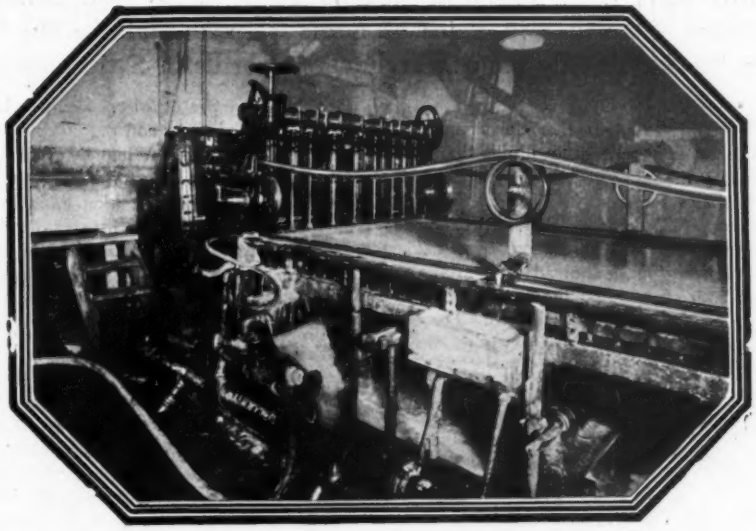
Lot No. 309.— 2,000,000 lbs. U. S. Postal Card Bristol Board, 22½x28½, 94 Rolls, 33 inches wide; and 34 inches in diameter (6 Inch Cores,) also 104 lbs., Rolls 44½ inches wide and not exceeding 32 inches in diameter, 6-inch cores. Sidney L. Willson, Receiver, 5.74 cents on both items.

INDEX BRISTOL BOARD WHITE AND COLORED

Lot No. 311.— 40,000 lbs. White Index Bristol Board. Flat, 22½x28½ inches, 91 and 115 lbs., in wrapped bundles of 500 sheets each, with projecting colored-paper marker between each 100 sheets. Minimum order, one weight 10,000 lbs. Virginia Paper Company, Inc., 8.18 cents if entire lot in one shipment; otherwise 8.635 cents.

(Continued on page 68)

— Patented —



Some Points About Design

The Voith High Pressure Stock Inlet is designed to meet many exacting requirements of modern paper making

1. Adjustable Discharge Nozzle

An adjustable discharge nozzle feeds the stock directly onto the wire in a smooth, steady, continuous stream. The flexible upper lip of the discharge nozzle is adjustable so that the thickness of the stock stream can be regulated, either as a whole across the full width of the sheet or locally at any point on the sheet. Local adjustment is effected by vertical screw threaded spindles equipped with locking handwheels. Full width adjustment is obtained by turning a single handwheel. The above features of design will enable your machine operators to guard against uneven caliper, thin edges and variation in basis weight.

2. Breast Roll Removal Arrangement

The Inlet is equipped with stationary legs when machines will allow for the removal of the breast roll without disturbing the location of the Inlet. Provision is made for raising the Inlet from its operating position on machines where it would interfere when removing the breast roll. In installations of this type, telescopic legs are furnished that allow the Inlet to be quickly raised from running position. This type of leg also provides a careful method for lowering the Inlet back into place and maintains its parallel position in relation to the wire. Moreover, it permits the Inlet to be fitted without difficulty to your machine.

Complete details given in our booklet.
Ask for copy.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

Quaker City Paper Business Trends Upwards

Most Marked Improvement Experienced in the Fine Paper Market—Demand for Coarse Papers Broadly Scattered—Advance in Price of Kraft Helps to Stabilize the Grade—Paper and Rag Stocks Moving from Warehouses to Mills in Satisfactory Volume

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., February 1, 1926.—In the final summary of the January paper markets as they pertain to Philadelphia and adjacent territory, compiled by the more prominent dealers, it was shown that the initial 1926 business was slightly in excess of 1925, with demand of a more generalized character. While the majority of dealers reported a slightly increased percentage over 1925, a few concerns are enjoying a very substantial advance in the demand for many grades of both coarse and fine papers purchased under mill contracts over a six month or longer period. The most gratifying evidence of the upward swing in business is the broadening of the markets to many grades that last year at the same period were decidedly laggard. This year the extension of orders to all papers generally consumed by commercial enterprises is firm conviction of the healthier trend of the industrial world. Sales representatives are being greeted with greater cordiality and with prompter purchases. While a few mill offerings in clearance or after inventory sales at first gave prospects of lowered prices these prospects of concessions were soon dispelled by a steadier tone. And so with all these sound factors dealers are preparing for livelier business as the Spring approaches.

Fine Papers Show Improvement

The most marked improvement in the early year as compared with 1925 was that shown in the fine paper market. Dealers have been assured of the healthier trend of the printing industry by the numerous orders that have been placed for all requirements needed by the allied industries, such as the publishing, engraving, stationery, advertising and printing trades. While the larger firms were the principal buyers under contracts of mill shipments there was a broadly scattered demand for papers among the job and commercial plants in the printing trades, where last year dullness was most accentuated. This brighter outlook for the printing industry has extended and travelers on the road are sending back considerably increased order lists at this season in anticipation of several weeks' requirements by the customers.

Coarse Papers Keep Pace With Upturn

Confirming statistics of the upward swing in the general industrial world the coarse paper market has experienced a miscellaneous demand of broadly scattered proportions. Kraft seems to have been eliminated as a disturbing factor with the steadier tone of prices in the closing days of the month. When the mills announced a rise in the price of No. 2 Kraft of $5 per ton it helped materially as a stabilizer of this grade. The advance coming from three or four of the larger and nationally known producers leads the dealers to believe that prices will hold at present levels throughout the Spring. Another helpful factor for the stability of the Kraft market is the delay of shipments from mills now being held up from two to three weeks because of advance orders. Paper board is among the active grades of the coarse paper market at this time. Grease proof, wax, food containers and glassine products too have been fairly well maintained among the salable products of the early year. The clothing industry, now preparing for Spring requirements, is consuming a large portion of paper products in boxes, wrappings, tissues and other specialties. Textile trades, hosiery and other knit goods manufacturers have been enjoying a more active January demand than in previous years and are buying accordingly.

Mills Buying More Stock

It is quite in keeping with the reported and very evident improvement in the general paper market that stocks in raw materials should show more activity. Demand has become general and the complete list of paper and rag stocks are again moving from warehouses to the mills. While demand has been rapidly expanding prices have held stationary at the levels of last Fall with a few exceptions in the rag market which have been advanced. The most heavy consumer of paper stock is the board manufacturer, now requiring larger shipments of the common grades.

Coarse Paper Men Discuss Conditions

The keynote of the January meeting of the coarse paper branch of the Philadelphia Paper Trade Association, held last Thursday at the Bourse Restaurant, was the brighter outlook the dealers have taken towards the future of the industry. There was no Doubting Thomas among the group of optimists who assembled at this gathering, each confirming the prevailing opinion of good times to come by declaration of the present sound basis of the paper trade indicated in the early 1926 markets. There was almost a 100 per cent representation present, including the latest member, Nathan D. Isen, president of the Enterprise Paper Company, and its secretary, A. B. Kehr. The membership committee were congratulated upon the successful campaign conducted last year and the increase in the list of those now included in the coarse paper division. An open meeting has been arranged for Monday, February 8, in the evening, at the Bourse Restaurant, with Harvey E. Platt presiding, for members and those who are not enrolled in the association. This special gathering has been planned for the purpose of promoting interest in the association and to give outside dealers an opportunity of learning the constructive work which is being carried out by the organization. Mr. Platt, a member of the J. L. N. Smythe Company, is one of the best informed men in this section of the country on the coarse paper industry and his talk will be most helpful and informative. E. S. Walter, of the Wilcox-Walter-Furlong Company, was chairman of the January meeting.

Champion Coated Paper Co. To Elucidate

Printers and allied associates will learn much of paper making as it is carried out in the plants of the Champion Coated Paper Company when the first of the 1926 educational talks and illustrated lectures will be given for the benefit of the Southern trade during the present month. On February 16, the printers in Richmond, Va., and on the 18th, those in the District of Columbia, will be guests at the first of the series of meetings, when E. Kenneth Hunt, advertising manager, will talk on paper making. He will give full details of paper production beginning with the sources of the raw materials and their preparation for pulp as it is worked out in the Champion Pulp Mills at Canton, N. C., and the manufacture of the paper as it is conducted in the Hamilton, Ohio, mills of the company, illustrating with slides the various phases of the work and mill operations. The Richmond meeting will take place at the Jefferson Hotel while the City Club in Washington, D. C., will be the gathering place for the Capitol printers.

New Equipment For National Water Proofing Co.

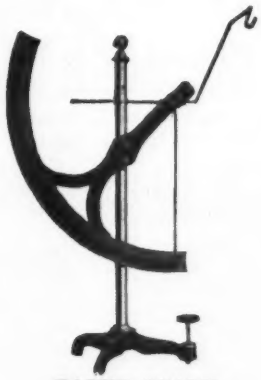
Included in the new equipment to be installed in the plant of the National Waterproofing Company, of Camden, is the Moore and White Layboy. The addition of this most modern device in the way of mechanical units provides the National company with an authomatic adjustable cutter and layer and will expedite the manufacture of its specialties in water proof products and tympan papers for printers' use. Another recent innovation in the machinery department is the installation of another slitter manufactured by the Cameron Machine Company, of Brooklyn, N. Y.,

(*Continued on page 46*)

Poller Paper Instruments Insure Accuracy

PAPER TESTER No. 400

Indicates accurately tensile strength in pounds and percentage and stretch in inches and percentage—all in one operation. Temperature makes no difference. It is the "Supreme Court" of all testing machines. No springs to get out of order. No glycerine or rubber discs to replace. All numerals are in English units and not in Continental Metric system.



PAPER SCALE

Indicates ream weight 24x36—480 and 500

These scales are furnished for weighing a full size sheet, 24x36, or a small piece. Both will indicate ream weight by direct reading. No springs. Special scale for Tissue Papers.

POCKET SCALE

For coarse or fine papers. By weighing a piece 2½x3¾ the standard ream weight is accurately shown. Very accurate and reliable. Weighs less than one pound and can be carried without inconvenience.

Folding Endurance Tester

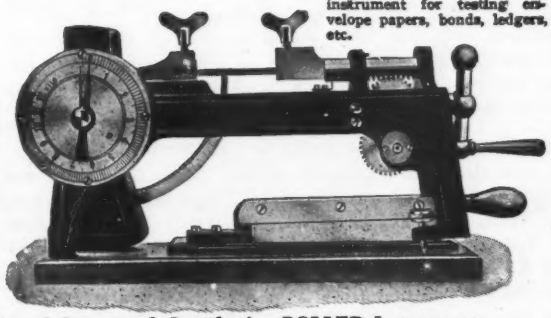
Indicates strength of paper by automatically folding a sample until it is worn through. A very valuable instrument for testing envelope papers, bonds, ledgers, etc.

AUTOMATIC MICROMETER

Measures thickness of board and paper accurately. Best instrument on the market for this purpose.

PAPER TESTER No. 399

Indicates stretch and breaking or tensile strength of paper. Operated by means of gears and screws. No springs to weaken and influence results. This machine is portable, weighing less than five pounds.



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THE UNION SELLING COMPANY

PAPER AND TWINE

210 Walnut Street, Cincinnati, Ohio

Activities of Paper Mills in Fox River Valley

Fox River Paper Co. Completes Important Improvements—Wm. Eibel Succeeds H. C. Hanke as Manager of the Plant of the Rhinelander Paper Co.—Wausau Sulphate Fibre Co. Does Biggest Volume of Business in Its History—Forest Conservation Discussed at Madison

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., February 1, 1926.—Construction of a large settling basin and a machine shop at the Fox River mill of the Fox River Paper Company, Appleton, is nearing completion and marks another step in the progress of the company which has just completed the most successful year of its history.

The newly built settling basin is 238 feet long, 25 feet wide and 14 feet deep. From these basins which have a capacity of 6,000,000 gallons a day, the water goes through the filter beds in the new machine shop building. Chemical analysis of the water which has passed through the settling basins and filter beds shows it to be as pure and free from bacteria as water which the people of Appleton use for drinking purposes.

The machine shop building, just being completed, is 101 feet long, 78 feet wide and two stories in height, with a basement. In it are to be housed the filter beds, roll grinders, machine shop, chemical laboratory and a store room.

Fox River Paper Company was started in 1883 and in the 42 years of its existence has become Appleton's largest industry. It operates four mills in the city, it having purchased the fourth, the Telulah mill from the Kimberly-Clark Company a few years ago. The company is one of the largest independent high grade writing paper companies in the world. Officers of the company are W. C. Wing, president; Harry Babcock, vice-president; Mason B. Olmstead, secretary; John Stevens, Jr., treasurer; E. T. Gamskey, sales manager.

Wm. Eibel to Manage Rhinelander Paper Co.

As a result of recent action taken by the board of directors of the Rhinelander Paper Company, of Rhinelander, H. C. Hanke, for several years manager of the plant, has been succeeded by the company's former manager, William Eibel. Mr. Hanke's plans for the future have not been announced.

A host of friends in Rhinelander welcome Mr. Eibel's return. He was general manager of the concern for many years and was considered a very capable man in his line. In the spring he will be joined by Mrs. Eibel and son, Donald, who are now in California, Donald being enrolled at Leland Stanford University.

Wausau Sulphate Fibre Co. Prospers

The Wausau Sulphate Fibre Company, of Mosinee, Wis., did a larger volume of business in 1925 than in any year since its organization, according to the annual report of N. S. Stone, general manager, to the stockholders at the annual meeting held last week. Business will continue to be prosperous for at least six months more, Mr. Stone said, because of orders now on hand.

Grandfather Falls Paper Co. Elects Officers

Directors elected at the annual meeting of stockholders of the Grandfather Falls Paper Company, of Merrill, last week, were: L. N. Anson, John O'Day, George A. Foster, F. W. Canfield, E. F. Hanf, J. N. Cotter and W. J. Sullivan. The directors elected L. N. Anson president; John O'Day and E. F. Hanf vice-presidents; George A. Foster, secretary and treasurer; J. N. Cotter, assistant treasurer, and W. J. Sullivan, assistant secretary.

Forest Conservation Discussed

Conservation of forests was the topic discussed by representatives of wood using interests in a conference with state conservation officials in Madison last week. The conference was attended by W. R. Wheaton, president of the Pulp Wood Company, Appleton.

It was proposed that a campaign of education be conducted in the forest regions for the benefit of the inhabitants so that fire hazards among forests may be reduced. A campaign of that nature is contemplated by the state conservation commission. It was also suggested that the plan of sending representatives to meetings of county boards of supervisors and explain the state's program be continued.

Merrill Woolen Mills Election

In another annual meeting in Merrill the same week the Merrill Woolen Mills elected officers as follows for the ensuing year: Albert Anderson, president; J. A. Emerich, vice-president; Mrs. Ida Cramer, treasurer; Max Van Hecke, secretary; Peter Olson, director. The year 1925 was declared a prosperous one, as was also the case of the Grandfather Falls Company.

Nekoosa-Edwards Paper Co. Meets

At the annual meeting of the Nekoosa-Edwards Paper Company of Port Edwards and Nekoosa, last week, the stockholders elected: L. M. Alexander, president; Judson G. Rosebush, vice-president; L. E. Nash, vice-president; J. E. Alexander, treasurer; C. A. Jasperson, secretary. The directors include the five foregoing officers and J. B. Nash, L. M. Hanks, G. W. Kibbe and F. J. Wood.

Estate of Late W. M. Gilbert

According to a petition for probating the will of the late W. M. Gilbert, president of the Gilbert Paper Company, Menasha, who died recently, the value of the estate left by the paper manufacturer is estimated at $200,000 which is in personal property. There is no real estate from which profits or rents accrue, it was stated.

THE PHILADELPHIA TRADE

(Continued from page 44)

cutting 50 inches. The company is now turning out a carload a day of its specialties in Duplex waterproof case linings, high finish waxed manilas, grease proof papers, and tympan products. The main offices of President Isaac Collins are located in the Drexel Building in this city.

Considine & Co. Confer With Cuban Agent

From the warm and sunny south to the bleaker and colder Philadelphia clime and main offices of the importing and exporting firm of Considine & Co., in the Public Ledger Building, the Cuban representative, J. A. Llopart, journeyed to talk over business plans for the new year. Mr Llopart is one of the best known Cuban paper men and has been developing a considerable patronage in his native isle for the local dealers. His visit north last week was substituted for that of the Southern trip, which had been arranged by N. A. Considine, president of the company, who was obliged to change his plans owing to the illness of his children. President Considine will make a tour of the Latin American territory later.

Strathmore Club Holds Annual Supper

[FROM OUR REGULAR CORRESPONDENT]

WORONOCO, Mass., February 1, 1926.—The Strathmore Club consisting of the office staff superintendents and foremen of the various departments of the Company held its annual supper at the Strathmore Inn, Thursday night, about 80 attending. Col. B. A. Franklin Vice President of the Company gave a talk on Industrialism.

A New Trademark

An Old Concern

DOWNINGTOWN MANUFACTURING COMPANY
Paper and Pulp Mill Machinery
EAST DOWNINGTOWN, PA., U. S. A.

Chicago Paper Trade Maintains High Position

Advances Previously Reported in Cheap Sulphite Bond Are Well Maintained—Coarse Papers In Healthier Condition Financially Than Fine Papers—Demand for Loose Leaf From Stationers Continues Brisk—Paper Stock Stronger Than a Few Months Ago

CHICAGO, January 30, 1926.—Cheap sulphite bond remains high with the market fluctuating to no great degree. Business is fair, with slight trends for bigger volume in the next few days. Large dealers in fine papers report that collections are far from being what they should be—an unfortunate condition which seems to be an eternal problem in business.

General conditions in Chicago are holding up well in all three divisions of the paper industry. The mills are being kept tolerably busy, and the mill men report favorable results from their visits to the paper merchants of Chicago. Fine papers are not in so healthy a condition, financially, as coarse papers, while paper stock is in excellent condition compared with a few months ago. Printers contribute largely to the generally good business, while the demand for loose leaf from the stationers does not seem to be falling off, despite the experience of past years.

Chicago Paper Association Meets

Wednesday evening of this week, January 27, a meeting of the new Chicago Paper Association was attended by a larger number of members and visitors than any of the previous meetings. The speaker of the evening commented on the general aims of the association, and the progress which has been made along general lines in the cost of doing business. Some revelations were made in that particular phase of the subject which deals with small orders. The association requests paper dealers all over the country to make investigations along these lines. Some of the figures which were read surprised the auditors considerably, and as a result inquiries are being made on the subject by a large number of coarse paper dealers in this city.

The analysis which was presented was partly the work of the committee which has been appointed to search diligently and systematically into the system of cost accounting which is being recommended by the National Paper Trade Association. The committee in question is composed of George Fox, C. J. Altholz, James Danehy and N. A. Schoenbucher, cost accountant of the National Paper Trade Association, who is working with the committee. Edgar A. Hall, Jr., the president of the Chicago Paper Association, has also personally contributed to this work.

The gathering, which was held at the Illinois Athletic Club, was the first meeting for the following new members: Beier & Co., Lake Shore Paper and Twine Company, McNulty Paper and Twine Corporation, and the Western Bag and Paper Company.

Staff of Hanchett Paper Co. Dines

The annual dinner of the sales force of the Hanchett Paper Company, held at the Blackstone Hotel last Thursday evening, had for its main speaker Edgar A. Hall, Jr., sales manager of the Pilcher-Hamilton Paper Company. He discussed the aims of the Chicago Paper Association, particularly the cost of doing business, and selling at a profit.

The assertion of the Chicago Paper Association, that "A paper company can no longer make a sale of $5 when the cost of delivery is $1," is being corroborated somewhat by paper dealers in various parts of the country. A more general co-operation is expected when proper importance is attached to the work, and more publicity given to it.

Western Paper Trade Association Elects Officers

The Western Paper Trade Association met Thursday, January 28, at the University Club, and elected the following new officers: President, Charles D. Brown, Bradner-Smith Paper Company; Vice-President, George B. Johnston, Western Paper Company, Omaha; second Vice-President, George Custer, W. F. Mackie Paper Company, Milwaukee; Secretary, Harry Washburn, Messinger Paper Company, Chicago; Treasurer, Harold Leahy, La Salle Paper Company, Chicago. Past President Lawrence Brady, of the Moser Paper Company, expressed his appreciation of the work of the association and the co-operation which its members accorded him during the past year. A large attendance from middle western cities was present at the meeting, presided over by the new president, and several topics of peculiar interest to the members of the association were discussed. Among those present was J. B. Jones, of the Western Newspaper Union, Omaha.

Miscellaneous Trade Notes

The Prairie Farmer Publishing Company, the oldest publishing house in Chicago, which is a center of publishing in the United States because of its location, is materializing plans for a four story printing plant at Washington Boulevard and Willard Court, at an estimated cost of $200,000.

The Burhop Paper Company, 28-30 West Austin Avenue, is issuing cards which can be hung in offices, advertising their brands of papers and twines.

George B. Johnston, manager of the Western Paper Company of Omaha, who visited a few friends after attending the meeting of the Western Paper Trade Association, has returned to Omaha.

Alexander Thompson, president of the Champion Coated Paper Company, of Hamilton, Ohio, has returned to Hamilton after a short visit.

Numerous Chicago paper men are in Pittsburgh attending the convention of the Central States Paper Trade Association. The reports of the survey committee, which is headed by Noble Gillett, of the Chicago Paper Company, and the regional committee, headed by J. H. Reed, of the Diem and Wing Paper Company, of Cincinnati, will be read.

V. D. Simons, industrial engineer, specializing in pulp and paper mills, hydro-electric and steam power plants, and electrification of paper mill properties, has removed his offices from 39 South La Salle street, to Room 2021 Tribune Tower, 435 North Michigan Avenue, Chicago.

Forest Survey Work in Canada

The Montreal office of James D. Lacey & Co. (Canada), Ltd., which was organized in February, 1924, reports that in the two seasons ending December 31, 1925, the forest survey projects in Quebec, Ontario and Nova Scotia, covered a grand total of 7,417 square miles, or 4,757,200 acres, which is greater than the combined area of Connecticut and Rhode Island and nearly as large as the entire state of Massachusetts. Of this total, the greater part, or 3,700,000 acres, was in aerial forest mapping, with the remaining 1,000,000 acres divided about equally between ground cruising alone and combined aerial and ground surveys.

The work was under the direction of F. T. Jenkins, manager of the Montreal office, which is under the general supervision of E. A. Sterling, manager of the New York office of the parent company, James D. Lacey & Co. Mr. Jenkins is a well-known forest engineer, formerly connected with the Ontario Forest Service and a graduate of the University of Toronto. Mr. Jenkins personally spent over 200 hours in the air during the past two seasons in aerial forest mapping.

BLEACHED and UNBLEACHED
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KRAFT PULPS
GROUND WOOD
NORRONA
PULP STONES

PERKINS-GOODWIN CO.
33 WEST 42nd STREET
NEW YORK

PAPER
PRINTING PAPER
of
EVERY DESCRIPTION

Obituary

WILLIAM M. GILBERT
President Gilbert Paper Co., Menasha, Wis.
Died January 9, 1926.

Glen Elroy McCarthey

SALT LAKE, Utah, January 29, 1926.—Glen Elroy McCarthey, general sales manager of the National Paper Products Company of San Francisco, died suddenly January 17, of pneumonia, at the Kearns home on East South Temple street. Sudden and tragic death ended a career bright with promise in the taking ot Mr. McCarthey, a personable young man whose attainments were noteworthy and whose successes were leading into further and larger fields of service.

Mr. McCarthey was born at Janesville, Wis., on November 13, 1893. After graduation from the University of Wisconsin, where he distinguished himself as a student and participant in athletics, he became associated with the Fort Wayne Corrugated Paper Company at Fort Wayne, Ind. War was declared when he was so employed and he enlisted at his earliest opportunity in St. Louis. He was sent to the officers' training school at Fort Riley, Kan., and commissioned a first lieutenant.

Lieutenant McCarthey was assigned to the Twentieth infantry, U. S. A., at Fort Douglas, and was honorably discharged from service at Camp Funston, Kan. While at Fort Douglas he was known as "Snappy" McCarthey a name derived from his soldierly qualities and given him by his men who honored, admired and respected him as a soldier and a man. He became well and favorably known, not only at Fort Douglas, but also in Salt Lake City.

He was married to Helen Kearns at Salt Lake, September 17, 1919. He then became associated with the National Paper Products Company of San Francisco and made his home in San Mateo. In his business life with this company his forceful personality, keen perception and ability to carry through projects to completion won him a high place in the business world of the Pacific Coast, where he was recognized as one of the coming men of his field of endeavor.

Carter Miller

CANTON, Ohio, January 30, 1926.—Carter Miller, advertising manager of The Timken Roller Bearing Company, died January 11, 1926, after a brief illness of a few days with pleuro-pneumonia.

Mr. Miller came with The Timken Company six years ago and was promoted rapidly to various positions both in the field with The Timken Roller Bearing Service and Sales Company, and at the home office with The Timken Roller Bearing Company. Later he was given charge of the Advertising Department, which position he held until the time of his death.

Mr. Miller was born in Bay City, Mich., and attended the elementary schools in that city. He later attended Kenyon College at Gambier, Ohio, graduating with the class of 1919. While at this institution he was active in the social and athletic life of the school. He was a member of the Phi Upsilon fraternity. While at college he was a candidate to receive a Rhodes scholarship, which carries with it a course of study abroad. He, however, declined to take the examination and elected to enter the business world. Later at Canton, Ohio, he was an active member of Brookside Country Club and a charter member of the University Club.

In the business world, Mr. Miller was recognized as a keen analyst of advertising and business problems. His association with The Timken Company brought him in contact with leading automotive and industrial companies, who frequently sought his advice and counsel in matters of advertising and publicity problems.

Mr. Miller is survived by his parents, Mr. and Mrs. A. M. Miller, of Ann Arbor, Michigan, three sisters, Mary Louise and Minna Miller, of Ann Arbor, and Mrs. John Addison, of Hollywood, Calif.; two brothers, A. M. Miller, of Elyria, and Albert Miller, the third, of Detroit.

Funeral service was held from the home of his brother Albert Miller, of Royal Oak, Mich. Burial was at Royal View cemetery, Royal Oak, Mich.

D. A. Crocker Speaks on Pulpwood

How the Pulp and Paper Industry obtains its present day supplies of pulpwood was described by D. A. Crocker, forester of the Woodlands Section of the American Paper and Pulp Association at the luncheon of the New York City Salesmen's Association held recently.

Mr. Crocker, who is a forester and woods manager of long experience, described in particular detail the methods of purchasing and operating common in the northeast, for peeled and rough four foot pulpwood, explaining the advantages and disadvantages of the various methods under different conditions and for different mills, and pointing out opportunities for improvements.

Following his description of operating and purchasing methods in the northeast, Mr. Crocker discussed briefly the outstanding differences in methods in Canada, the Lake States and the South Atlantic States.

In conclusion, he explained the work which he is doing for the Woodlands Section and the service the Woodlands Section now renders to the industry. This includes regional investigations of questions of pulpwood supply and consumption and detailed studies of possible profitable methods of Forest Management. Also service on operating problems such as the introduction of motor transportation into woods operations, use of sawing machines and other problems looking toward the introduction of machinery into woods operations. Other phases of the work include studies of wood purchasing problems, woods cost accounting methods and many others confronting the woods manager.

The Woodlands Section is now in a position to be of great service to the industry, and judging from the requests for studies of specific problems which have already been received, the industry intends to take advantage of this fact.

B. F. Perkins & Son Move to Larger Quarters

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., February 1, 1926.—The work of removing the machinery and fixtures of the B. F. Perkins & Son, Inc. from their present plant on Crescent street to their new plant over the river in Willimsett has begun and will take several weeks before the entire transfer is made. For the present it is not expected that there will be any increase in help, but later the enlarged quarters will allow of very material expasion.

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Soda Fountains
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Trade Marks Department

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The following are trade-mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade Mark Company, Barrister Bldg., Washington, D. C., trade-mark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

PAPILLON—No. 210,331. United States Envelope Company, Springfield, Mass. For writing and printing papers, cards, and envelopes.

MARQUESS—No. 210,330. United States Envelope Company, Springfield, Mass. For writing and printing papers, cards, and envelopes.

KELKO—No. 210,329. United States Envelope Company, Springfield, Mass. For same as above.

WHITEDGE EFFICIENCY—No. 216,297. H. M. Storms Company, New York City. For carbon paper.

REMTICO—No. 222,519. Remington Typewriter Company, Ilion and New York, N. Y. For typewriter papers.

CLEAR TITLE BOND—No. 224,032. Marquette Paper Company, Chicago, Ill. For bond writing paper.

OLDE STYLE PARCHMENT—No. 224,420. The Peck Engraving Company, Cleveland, Ohio. For writing paper.

BEN MONT—No. 223,763. Bennington Wax Paper Company, Bennington, Vt. For wax paper, wax lunch rolls, dry and waxed shredded paper, Christmas wrapping paper, and shelf papers.

AIRBUFF—No. 206,032. Frank M. Sayford Company, Brooklyn, N. Y. For packing and wrapping paper for confectionery and the like.

Watervliet Paper Co. to Increase Capital

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., January 25, 1926.—To provide funds for the expansion of their paper mill and coating plant in Watervliet, the stockholders of the Watervliet Paper Company have voted, authorizing the increase of the capital stock of the company from $820,000 to $1,000,000. This is to be accomplished by the sale of 18,000 shares of common stock, with a par value of $10 each for $20 per share, the book value of all stock now outstanding. The stockholders further authorized the issuance and sale of $500,000 first mortgage six per cent bonds.

Stock of the Watervliet Paper Company is considered among the most valuable and lucrative of any of the paper mill securities in the Kalamazoo valley district. For years under the direction of W. M. Loveland, president and general manager, this stock has increased in value and now pays 12 per cent per annum on the face or par value. Continuance of the same rate of dividends was authorized for 1926 and it was also provided that the new stock as soon as issued and paid for will go on a similar dividend basis. The company has a large surplus in the treasury, including $200,000 of government bonds, all purchased during wartimes and retained for expansion purposes.

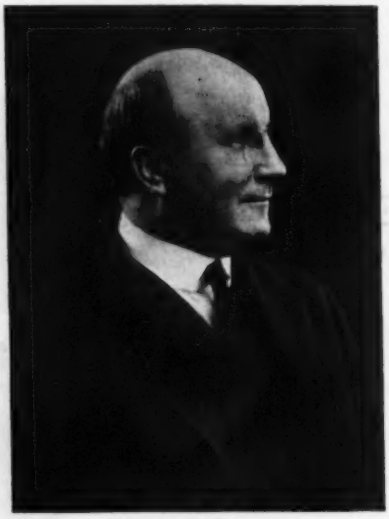
The improvements to be included in the present campaign, are in addition to the erection of certain new buildings, or additions to present buildings, the installation of a new type fourdrinier machine for the manufacture of book, coated raw stock and offset papers; also an improved system for the conversion of old papers into paper stock and many improvements in the coating division. It is planned to have the new equipment installed and working by January 1, 1927.

During the past twelve months death has taken two of the oldest directors on the Watervliet Paper Company's board. They are Harrison Geer, Detroit, and W. M. Baldwin, Watervliet. William A. Geer, Detroit, and assistant attorney of the Grand Trunk Western railroad, has been elected to succeed his father, while L. B. Anderson, Battle Creek, will take the seat made vacant by the death of Mr. Baldwin. Mr. Anderson is heavily interested in Kalamazoo industries and banking concerns.

The other directors named are W. M. Loveland, C. B. Hays, August B. Scheid, John A. Pyl, J. B. Balch, Fred Scheid and R. A. LeRoy, all of Kalamazoo. The officers are: President and general manager, W. M. Loveland; vice-president, C. B. Hays; treasurer, A. B. Scheid; assistant treasurer, John A. Pyl; secretary, Frank D. Gilchrist. The last named official resides in Watervliet.

Col. Collins Heads Graham Paper Co.

ST. LOUIS, Mo., February 1, 1926.—Martin J. Collins was elected president of the Graham Paper Company at the annual meeting last week to succeed J. P. Tyrrill, who retired the first of the year. He has been vice president of the concern for a score of years.



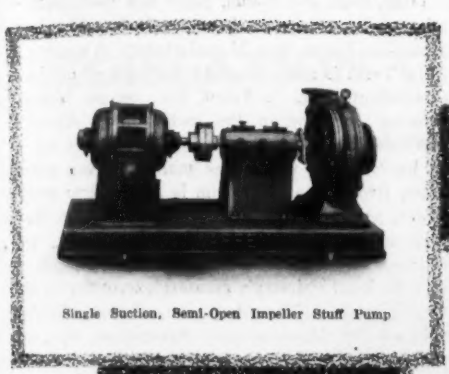
MARTIN J. COLLINS

The Graham Paper Company is said to be the largest wholesale paper house in the world, with its headquarters in St. Louis. It has fourteen branch houses located throughout the United States, with permanent agencies in every large city in America, Cuba and Old Mexico.

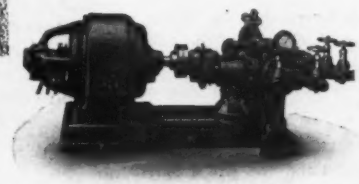
Col. Collins has been active in civic and political affairs of the city and state for twenty-five years. His "hobby" is boy-life, being vice president of the Big Brother Organization, director of the Park and Playground Association, president of the Missouri School for the Blind, and a director of the Security National Bank.

$400,00 Pulp Mill Contract Placed

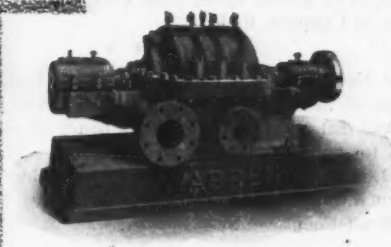
MONTREAL, Que., January 25, 1926.—The Dominion Bridge Company, of Montreal, has been awarded contracts representing nearly $400,000 for steel construction work at the pulp mill of the Manitoba Pulp and Paper Company, Limited, at Fort Alexander. This is the first big construction step which will make Fort Alexander, 70 miles from Winnipeg, one of the biggest pulp and paper centers in the Dominion. A spur track has already been constructed to the site of the coming town and several hundred workmen are preparing the foundation for the units of the factory and building houses for mill employees. The first passenger train will be operated from Winnipeg to the mill site on Tuesday. A direct service has been established from Winnipeg to Fort Alexander. Trains will leave the city Tuesdays and Fridays, returning the same evenings. Freight trains are already operating carrying contractors' materials to the site.



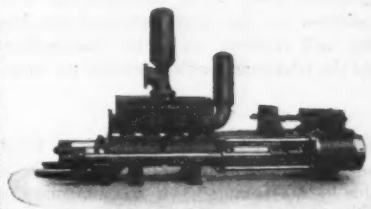
Single Suction, Semi-Open Impeller Stuff Pump



Single Stage, Double Suction Centrifugal Fire Pump



Multistage Balanced Type Centrifugal Pump for Boiler Feed and High Pressure Service



Duplex Outside End Packed Plunger Pump

For every Service in the Pulp and Paper Mill

Now that there is a Warren Pump for practically every service in the mill you can be certain of efficient and dependable pumping service simply by specifying *Warren.*

Every Warren Pump is designed, built and tested to insure the user lowest possible cost of operation and maintenance per year.

A large and increasing number of pulp and paper mill men are recognizing the advantages of standardizing on pumps that meet this ideal of pumping service.

Our engineers will be glad to help you, too, to obtain the utmost return on your investment in pumping equipment. Will you get in touch with us?

Warren

Steam Pump Company—Warren, Mass.

Boston Philadelphia Chicago

WARREN

San Francisco New York St. Paul

New York Trade Jottings

At the annual meeting and dinner of the Kansas Society of New York, held last Friday, "Kansa Day" at the Hotel Roosevelt, Royal S. Kellogg, secretary of the News Print Service Bureau, was unanimously elected president for the ensuing term.

* * *

F. M. Lugo announces his withdrawal from the Lay-Lugo Paper Company, 29 Broadway, New York, effective January 15, 1926. Mr. Lugo will continue his activities in the paper exxport field, having established an office at 25 Beaver street, New York.

* * *

L. R. Wilson, vice-president and managing director of the Abitibi Power and Paper Company, Ltd., of Montreal, Que., and the new president of the Canadian Pulp and Paper Association, has been visiting his friends in New York, and is now bound for the Sunny South on an automobile tour.

* * *

A contract involving the shipment of 40,000 tons of wood pulp from Newfoundland and (or) Nova Scotia to a United States port north of Hatteras during the current year has been closed through J. A. Horan & Co., Inc., ship brokers and steamship agents, of 25 Beaver street, New York, recently established to specialize in Canadian trade.

* * *

The Union Bag and Paper Corporation has issued a notice to holders of Series A first mortgage 6 per cent gold bonds of the company that all of the outstanding bonds of this issue have been called for redemption at 105 on May 1 next. The bonds are dated May 1, 1922, and are due May 1, 1942. Holders are requested to present them for redemption on or after May 1 next at the Empire Trust Company, New York.

* * *

Safepack Mills, Boston, Mass., manufacturers of waterproof paper, announce the removal of their New York office and warehouse from 39 Great Jones street to larger quarters at 46 Great Jones street. A complete stock of the Safepack line will be carried at the new address for the convenience of the New York jobbers. The office will continue under the management of F. Schenkelberger, and the telephone number remains the same, Spring 8775.

* * *

The first offering of 7 per cent preferred stock to its employes by the International Paper Company has resulted in the purchase of $720,000 par value by 2,000 employes, it was announced recently. The plan permits the purchase of stock on deferred payments and also provides for bonuses of $1 to $5 per share at a progressive annual rate over a five-year period. It was intimated in the announcement that there might be additional offerings in the future. Such action would be in line with the company's plans for the improvement of the status of its employes.

* * *

Marquand, Blake and Decker, Inc., have removed to new and more commodious quarters at 153-155 Spring street, New York. In an announcement to the trade this old-established organization says: "In such a simple and relatively unimportant move as this we see no reason for employing the loud voiced crier to shout the customary gag that 'at last we are ready and equipped to give you the superlative service which our commodious new quarters now make possible.' Service does not come out of space or a building but from a highly trained organization always on the job at all times to do everything possible in the interest of good business, and once in awhile doing the impossible. To be sure additional space means additional stock. Eight trunk lines mean no delays, mighty valuable aids in the hands of our staff. To that extent our removal to 153-155 Spring Street is not without its advantages."

Walter E. Trum, solid and folding paper box manufacturer, and Rotarian leader of Brooklyn, has been recalled to the presidency of the Metropolitan Paper Box Manufacturers Association, Inc., New York. Mr. Trum is one of Brooklyn's leading business executives and is president of E. J. Trum, Inc., second largest paper box manufacturing company in the metropolitan district. The business, which has been conducted at 55 Third street for a number of years, has recently taken new manufacturing quarters at 505 Court street, Brooklyn. Mr. Trum is also a firm member of one of the largest paper box manufacturing concerns in the world, namely, Gerbereux, Dufft and Kinder, of New York. In again assuming the leadership of the Metropolitan Association, Walter E. Trum pilots the local industry's greatest executives in their association accomplishments. The other newly elected officials of the Metropolitan Paper Box Manufacturers Association, Inc., are William H. Casselman, of T. and E. Casselman, vice president; Edward H. Rogers, of E. H. Rogers, Inc., treasurer; Harry Edwin Roden, executive chairman, and Ned Roden, Jr., executive secretary. The meetings of the Metropolitan Association are held weekly in the Hotel McAlpin, New York.

International Paper Forces Foregather

A regular "Gathering of the Clans" was held by the International Paper Company last week end. On Friday and Saturday, all the mill managers and sales agents of the company attended a conference with the officers of the organization at headquarters, Pershing Square Building, New York. A reception and dance under the auspices of the New York Chapter of the Employees' Mutual Benefit Association, took place on Friday evening, at the Hotel Astor. Approximately 400 members of the staff and their friends graced the occasion and tripped the light fantastic until the early hours of the morning to the strains of the music provided by Jules Leroy's excellent orchestra. From every standpoint this event proved a huge success.

On Saturday evening, the annual dinner and dance of the Quarter Century Society—which is composed of those members of the International who have been with the company for 25 years or more—was held at the Hotel Vanderbilt. Incidentally, this was the first occasion at which the Quarter Century Society officers officially recognized the more recent acquisitions to the International Paper Company, including the staffs of the Riordan—Gatineau organization; the Ticonderoga Pulp and Paper Company; the Bastrop Pulp and Paper Company, etc.

Owen Shepherd, treasurer of the International Paper Company, and the indefatigable president of the Quarter Century Society, was the official host. During the course of the evening appropriate addresses were given by A. R. Graustein, president of the International Paper Company, and several of the directors. One and all of the 310 guests who participated in the dinner and dance agreed that it was a most distinguished and enjoyable function.

The enormous success of this "Get Together", and the events held in connection therewith, speaks volumes for the *esprit de corps* of the International Paper Company organization.

H. A. Moses Tells About Early Start

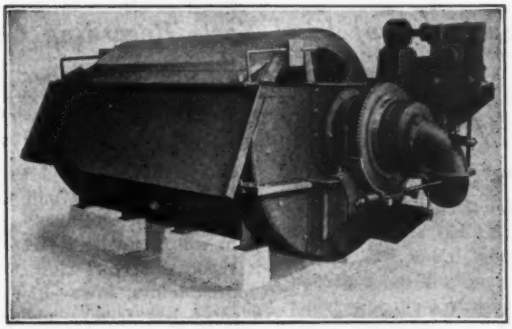
[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., February 1, 1926.—Horace A. Moses, President of the Strathmore Paper Company, in an address before the Employee Boys Fellowship clubs at the Springfield, Y. M. C. A., Thursday night, told of his early life on his father's farm in South Ticonderoga, N. Y. He was injured at 13 and received no schooling for that reason until after 18.

"I came to Springfield when I was 21 years old," he said, "then went to school in Vermont, having to barrow $300 for my second year's schooling. I studied the paper business, ran a mill when I was 26, having great success. In 1892 I bought the property that is now the Strathmore Paper Company."

LEGISLATION ON STREAM POLLUTION

does not mean profit for Paper Mills



OLIVER SAVE-ALLS

put to work on White Water
will change the meaning entirely.

Not only will Stream Pollution cease to worry but at the same time the OLIVERS will make money for the mill where they are installed.

BECAUSE

White Water to OLIVERS contains 2.20 lb. fibre per 1000 gals.

Discharge from OLIVERS contains 0.21 lb. fibre per 1000 gals.

Install OLIVERS.
Cease worrying.
Save money.

Oliver Continuous Filter Co.

San Francisco
801 Cunard Building

New York
1423 Aeolian Building

London
11 Southampton Row

Johannesburg, South Africa
E. L. BATEMAN, The Corner House

CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Glendale, L. I., N. Y.—The Pequot Manufacturing Company, Thompson avenue, Long Island City, N. Y., has secured a tract of land fronting on the line of the Long Island Railroad at Glendale, known as the Schmidt property, and will use a portion of the site for the immediate erection of a new multi-story plant for the manufacture of its regular line of corrugated paper boxes and containers, reported to cost close to $500,000, with machinery. It is understood that the present works will be removed to the new location. The company is also considering tentative plans for the erection of a new paper mill on adjoining portion of the land, reported to cost approximately $750,000.

Joliet, Ill.—The Gerlach-Barklow Company, Washington and Richard streets, manufacturer of paper goods, has awarded a general contract without competition to Hansen & Peterson, South Des Plaines and Allen streets, Joliet, for a new three-story and basement addition, 75 x 295 feet, at Richards and Union streets, estimated to cost $250,000, with machinery. Charles W. Webster, Cutting Building, Joliet, is architect.

East Liverpool, Ohio—The East Liverpool Paper Box Company, recently formed with a capital of $30,000, by J. Clare Smith and R. J. McElravy, East Liverpool, has leased a floor in the Milliron building at the foot of Washington street for the establishment of a new plant for the manufacture of corrugated paper boxes and containers. A list of machinery to be installed has been arranged and it is expected to have the initial works ready for service early in March. Mr. McElravy has been elected president of the new company, and Mr. Smith, treasurer.

Steubenville, Ohio—The local mill of the Hartje Paper Company, operating under a receivership for about 6 months past, has been sold at a public auction to L. J. Cullen, Chicago, and associates, representing the holders of the first mortgage on the property, for a consideration stated at $350,000. It is said that plans are under way for a reorganization of the company and the resumption of operations. The plant was established by the late Augustus Hartje, Pittsburgh, Pa.

New York, N. Y.—The Jefferson Paper Box Company, 98 Greene street, has leased a portion of the building at 541 East 17th street, extending to 292 Avenue B, for a new plant. It is understood that the present works will be removed to this location and additional equipment installed. Abraham Kaplan is president.

Minneapolis, Minn.—The Backus-Brooks Company, Minneapolis, Minn., is said to have preliminary plans under way for the construction of a new paper and pulp mill in Washington State, where a tract of land has been selected along the Cowlitz River. The project will include a hydroelectric generating plant for service at the mill and permission has been secured to proceed with the erection of this latter. It is purposed to construct a power dam on the river noted, with initial generating equipment for a capacity of 100,000 hp. The entire project is reported to cost in excess of $7,000,000.

Laurel, Miss.—The Mason Fiber Company is pushing construction on its new mill unit and plans to have the structure ready for the machinery installation at an early date. The plant will be used for the production of fibre board products and is reported to cost close to $1,000,000 with machinery.

Des Moines, Iowa—Plans are under way for the erection of a paper box factory addition at the local mill of the Rollins Hosiery Company, Dean and Twenty-eighth streets. It will be two-story, 35 x 45 feet, reported to cost about $25,000, with machinery. Lockwood, Greene & Company, 400 North Michigan avenue, Chicago, are architects and engineers.

Dallas, Tex.—The Pollock Paper and Box Company, 1911 North Lamar street, will proceed with superstructure for its proposed new plant at Caruth and Lamar streets, for which a contract recently was awarded to G. W. Davis, Texas Building. It will be one-story, 258 x 268 feet, estimated to cost close to $200,000, with machinery. A list of equipment to be installed will be arranged at an early date. Lawrence S. Pollock is president and general manager.

Philadelphia, Pa.—The M. Kardon Paper Company, 224 Pine street, manufacturer of paper boxes and containers, has plans in progress and will ask bids during February for a new addition to its plant, to be four-story and basement, 70 x 145 feet, reported to cost approximately $80,000, with equipment. J. E. Fieldstein, Otis Building, is architect.

Nazareth, Pa.—The Bates Valve Bag Company, manufacturer of paper bags, has work nearing completion on a new factory on Meadow Lane, and will provide equipment for an initial capacity of about 200,000 bags per day. The present mill will be removed to the new location and considerable additional machinery provided. It is expected to give employment to close to 100 operatives. Headquarters of the company are at 8200 Chicago avenue, Chicago.

Jonquieres, Que.—The Price Brothers Company, Ltd., Montreal, has plans under way for mill extensions in this section, including the installation of paper and cardboard machines, estimated to cost $175,000. It is expected to proceed with the work at an early date. A. Duehastel de Montague, Quebec, is architect and engineer in charge.

Hull, Que.—The Canadian International Paper Company, Hull and Three Rivers, has commissioned O. Lefevre, Montreal, Que., engineer, to prepare plans for a proposed hydroelectric generating plant in this vicinity, reported to cost in excess of $2,000,000, with machinery. It is expected to proceed with the project at an early date.

New Companies

Pittsburgh, Pa.—The Seyler Paper Company has been incorporated with a capital of $20,000, to manufacture and deal in paper products. J. F. Peacock, 1640 East Superior avenue, Cleveland, Ohio, is treasurer.

New York, N. Y.—The Uptown Card and Paper Company

has been incorporated with a capital of $20,000, to deal in cardboard and paper products. The incorporators are A. M. Silverman, M. Gladstone and B. H. Licht. The company is represented by Licht & Licht, 1440 Broadway, New York.

Jersey City, N. J.—The Gotham Card and Paper Company, Inc., has been incorporated with a capital of $15,000, to manufacture and deal in paper products. The incorporators are Morris Leibman, 721 Newark avenue (company representative), Barnet A. Smith and Theodore C. Berman.

Wilmington, Del.—The American Paper Mache Company, Inc., care of the Colonial Charter Company, Ford Building, Wilmington, has been incorporated with a capital of $100,000, to manufacture paper mache specialties.

Greensboro, N. C.—The Dillard Paper Company has been incorporated with a capital of $100,000, to manufacture paper goods. The incorporators are John P. Harvey, 2312 Rivermont avenue, Lynchburg, Va.; and Stark S. Didard, Greenboro.

New Cumberland, Pa.—The Midget Card Company, Inc., has been incorporated with a capital of $25,000, to manufacture and deal in cardboard products, card stocks, etc. C. O. Dick, 540 South 16th street, Harrisburg, Pa., is treasurer and representative.

New York, N. Y.—The Gillette Fibre Mills, Inc., has been incorporated with a capital of $200,000, to manufacture fibre and paper boxes and containers. The incorporators are A. T. Douglas, C. Dart and N. P. Gatling. The company is represented by Beekman, Bogue, Clark & Griscom, 52 William street, New York.

New York, N. Y.—The Elish Paper Stock Corporation has been incorporated with a nominal capital of $5,000, to deal in paper products. The incorporators are D. and M. M. Elish. The company is represented by Daniel Gutman, 38 Park Row, New York.

Philadelphia, Pa.—The Richie-Howarth Paper Company has been incorporated with a capital of $160,000, to manufacture paper goods. John R. Howarth, Haddon Heights, N. J., is treasurer and representative.

New York, N. Y.—Beebe-Thomas, Inc., has been incorporated with a capital of $50,000, and 2,000 shares of stock, no par value, to manufacture paper products. The incorporators are J. L. Beebe, Jr., C. Kimball and E. B. Thomas. The company is represented by C. Kimball, 47 West Thirty-fourth street, New York.

Ontario Changes Pulpwood Policy

TORONTO, Ont., February 1, 1926.—James S. Lyons, Ontario's Minister of Lands and Forests, in announcing today the terms of the new timber contracts about to be consummated between the department and five pulp and paper companies, estimates that new revenue of $2,000,000 a year will be brought into the Provincial treasury. This will be possible through the cutting of millions of cords of additional pulpwood. It will also mean an increase in newsprint.

An important feature in the new contracts is the prohibition of the export of any semi-manufactured products. All the pulp must be manufactured into newsprint before export will be permitted and 15 per cent of the total production is to be reserved for Canadian consumers. This is slightly in excess of domestic consumption at present, but is designed to protect Canadian publishers.

The complete development necessary under these contracts will require a total expenditure of $80,000,000 in the erection of pulp and paper mills, transportation facilities and power development by the Hydro-Electric Power Commission on the Nipigon River.

Geo. Hancock Goes With Inland Board Co.

VERSAILLES, Conn., January 25, 1926.—George Hancock, formerly superintendent of the mill of the Robert Gair Company, at Montville, Conn., has become superintendent of the plant of the Inland Paper Board Company, Inc., here.

Heads Ravenswood Paper Mill Co.

Harry Kovner, at the annual meeting of the Ravenswood Paper Mill Company, Long Island City, held a few days ago, was honored with the Presidency of that corporation, while Joseph Kramer, of the Garment Center Fibre Box Corporation, and other companies, was chosen treasurer. Mr. Kovner has been identified with the Ravenswood Paper Mill Company for the past four or five years, and he and the other members of the corporation have made possible the building up of a splendid board business, which, by the way, is the only paper board manufacturing concern directly in Greater New York.

In addition to the board mill interests, Mr. Kovner heads the Kovner Paper Box Company, located in Wooster street, New York City, and is president of the Hygrade Corrugated Company, which has just moved from New York to its own new building in Long Island City. Mr. Kovner has always been extremely successful in all of his undertakings.

To Represent Consolidated Paper Co.

MONROE, Mich., February 1, 1926.—L. C. Jordan has been appointed to succeed G. F. Gallagher in charge of the Chicago sales office of the Consolidated Paper Company, of this place.

L. C. JORDAN

Mr. Jordan has a number of years of successful industrial sales work to his credit and for some years has been identified with the paper box business and is qualified to render intelligent and efficient service in the selection of shipping containers, cartons and folding paper boxes.

Preparing To Reopen Carthage Sulphite Plant

CARTHAGE, N. Y., January 30, 1926.—Twenty-five men are at work at the plant formerly operated by the Carthage Sulphite Pulp and Paper company, overhauling the machinery and equipments and taking out machinery that will not be used, as well as making repairs and alterations and installing new machinery. The offices are also being renovated.

The reorganization, it is understood, will be complete and the new concern will undoubtedly conduct business as the Carthage Paper Board Company, Inc.

James Quinn of Watertown, who is to be superintendent, has been here for several weeks. John R. Draper, the sales manager of the new concern, has been in Carthage some 10 days going over matters at the plant with Mr. Quinn. It is planned now to begin actual production about March 15, from which time employment and production will increase.

PAPER TRADE JOURNAL
ESTABLISHED 1872
With Which Is Combined
PAPER
The Magazine of the Paper Industry
HENRY J. BERGER, Editor
Member A. B. C. Audit Bureau of Circulations
Vol. LXXXII New York, February 4, 1926 No. 5

COMING EVENTS

American Paper and Pulp Association, Convention and Meeting of Affiliated Associations, Waldorf-Astoria, February 22-25. Annual Banquet, Grand Ball Room, Thursday, February 25.

National Paper Trade Association, Convention, Waldorf-Astoria, February 22-24. Annual Banquet, Grand Ball Room, Wednesday, February 24.

Technical Association of the Pulp and Paper Industry, Convention, Waldorf-Astoria, February 22-25. Annual Banquet, Hotel Commodore, Tuesday, February 23.

Salesmen's Association of the Paper Industry, Convention, Waldorf-Astoria, February 23. Annual Dinner, Roof Garden, Tuesday, February 23.

A NAIVE SUGGESTION

The Hon. L. A. Taschereau, premier of Quebec, last week at theannual convention of the Canadian Pulp and Paper Association made the naive suggestion that if Americans objected to an embargo on pulpwood from freehold lands, the way to prevent such an embargo is to give free entry to all paper entering the United States from Canada.

The Premier and his audience, who are reported to have loudly cheered this suggestion, failed to remember, apparently, that some such arrangement was attempted back in 1911 with the result that the United States probably will not be easily again tempted into anything approaching such a monumental piece of stupidity. The former occasion referred to was the Taft reciprocity fiasco with Canada, which resulted in allowing paper under 4 cents per pound to come into the United States free of any duty with nc compensation in return from Canada.

To refresh the Premier's memory a brief summary of this incident, taken from the PAPER TRADE JOURNAL of September 11, 1911, is reprinted herewith:-

The Governments of the United States and Canada having decided that a reciprocal trade arrangement between the two countries would be mutually beneficial, appointed commissioners, who met and arranged details which were finally approved by the respective administrations of the Dominion and the United States. This agreement provided for a mutual customs tariff reduction on a number of food products, raw and manufactured, agricultural implements and a few manufactured articles of general utility, and in the removal of the duty by both countries on live animals, grain, fish, vegetables, seeds and lumber. It was also agreed between the commissioners that pulp and paper (the latter valued at not more than 4 cents per pound) when the product of Canada, and upon which no export tax or other export restrictions were levied, should be admitted free into the United States. It was also agreed at the same time that when the restrictions as to the export of pulpwood imposed by the Canadian provinces should be removed, and when per consequence of this removal the United States had abolished the existing countervailing tax on the pulp and paper from this wood, then there should be free trade in all lines of paper between the two countries.

"Thus was the agreement drawn by the commissioners and approved by the Executives of the United States and Canada. But when the bill was introduced to make the tariff change legal, Congress struck out all reference to pulp and paper from the body of the document and made of them a second section which provided for the free admission of Canadian pulp and paper from wood pulp upon which there was no export restriction, regardless of any act whatsoever by the Dominion. In other words, the "Reciprocity" bill, as passed by Congress and signed by the President on July 26 last, removed the duty on pulp and paper, the product of Canada (when free from export restrictions), without requiring any compensatory concession.

"This having been the desire of Congress and the Administration, the tariff change in respect to pulp and paper became operative immediatelw upon passage of the bill on July 26 last, and since that day this country has enjoyed the benefit (?) of free wood pulp and newsprint paper, while the Canadian duties on all American products have remained as heretofore. So far as concerns the customs duties on pulp and paper, the result of the Canadian elections today (Thursday, September 21,) will have no effect except that it may happen that if the Dominion rejects the reciprocal agreement, the other nations may object to what would undoubtedly be a breach of the favored nation treaties, in that the United States had given Canada something for nothing and so discriminated against them. It might in this way happen that Congress would be forced to abrogate the act of July 26. or place all nations on the same footing as Canada in respect to pulp and paper."

To complete the story it should be added that when the vote was taken our good neighbors across the line overwhelmingly rejected the measure.

In the light of the foregoing facts it is timely to remark that history probably will not repeat itself.

PAPER MILL EMPLOYMENT

The increasing improvement in the pulp and paper industry is reflected in the wage and employment figures for December just made public by the Bureau of Labor Statistics of the Department of Labor.

Replies were received by the bureau from 207 paper and pulp mills which reported their employment in November at 55,439 increasing in December to 55,681 an increase of 0.4 per cent. The payrolls in these mills also increased from $1,506,021 in November to $1,515,022 in December an increase of 0.6 per cent.

One hundred and forty-nine paper box plants reported their employment in November at 17,173 decreasing in December to 16,843 a decrease of 1.9 per cent. The payrolls in these plants also decreased from $383,177 in November to $376,690 in December a decrease of 1.7 per cent.

The bureau also received replies from 201 paper and pulp mills

who reported their employment in December, 1924 at 53,197 increasing in the same month of 1925 to 54,698 an increase of 2.8 per cent. The payrolls in these plants also increased from $1,423,652 in December, 1924, to $1,489,724 in December of last year an increase of 4.6 per cent.

Replies were also received by the bureau from 133 paper box factories who reported their employment in December, 1924 at 15,199 increasing in the same month of last year to 15,322 an increase of 0.8 per cent. The payrolls in these plants also increased from $330,912 in December, 1924, to $343,669 in December of last year, an increase of 3.9 per cent.

Gilette Fibre Mills Organized

STILLWATER, N. Y., February 1, 1926.—At a meeting of the board of directors held in New York city, officers were elected and a new industry incorporated under the laws of the State of New York to be known as the Gilette Fibre Mills. This new industry will be located in the Wood Flong building, village of Stillwater, where a ten cylinder paper machine, the only one of its kind in existence, has been installed. This machine is specially designed for the making of hard and flexible products such as fibers, cut linen and wood pulps used in electrical, automobile and trunk manufacturing industries. The officers elected were:

President, H. R. Gilette of Boston, Mass.; vice president, Jackson Townsend, Stillwater; treasurer, Benjamin A. Wood, of New York city.

This business was incorporated with a capitalization of $300,000.

The plant will soon be in operation twenty-four hours a day and will employ three shifts which will mean a boom for Stillwater as an industrial centre, it is announced.

The vice president, Jackson Townsend, has been resident manager of the Wood Flong corporation of this village for the past nine years and has been one of the most highly esteemed citizens of the place, working incessantly for the progress and prosperity of the community.

The president, H. G. Gilette, of Boston, has been in Stillwater on business on many occasions and has made a large circle of friends, who will be pleased to hear of his newly organized industry and hope for its future success.

Standard Paper Co. Has Excellent Year

KALAMAZOO, Mich., February 1, 1926.—The year 1925 was an excellent one for the Standard Paper Company according to reports issued at the annual meeting of stockholders, held Monday afternoon at 3:00 in the company's office. B. C. Dickinson, president of the company, reported that both the carton and mill divisions of the plant are now operating at full capacity with heavy orders booked well in advance and the outlook for 1926 equally flattering.

During the past twelve months extensive improvements have been made at the plant. A large steel and concrete warehouse has been erected and equipped with the most approved type of conveyor machinery for handling paper stock. A Dorr Save-All for the reclamation of waste and the purification of white water before passing into the river has been installed. Numerous minor repairs have also been made about the plant and the property is in fine physical condition.

Stockholders voted unanimous endorsement of the Kalamazoo Community fund.

The annual election resulted in the following directors being re-elected for the ensuing year: J. F. Byrne, A. L. Clark, E. A. Dunwell, W. J. Lawrence, James H. Dewing, B. C. Dickinson, H. S. Humphrey and C. H. Stearns. Officers for the ensuing year named are: President, B. C. Dickinson; vice president, J. H. Dewing; secretary-treasurer, A. L. Clark; assistant secretary, J. T. Bachelder; general manager, J. F. Byrne.

To Build News Print Mill at Kapuskasing

TORONTO, Ont., February 1, 1926.—Establishment of a huge news print industry in the vicinity of Kapuskasing, Ont., on the Government Transcontinental Railway by Kimberly-Clark Company of Neenah, Wis., was announced recently by J. H. Black, of Toronto, who is president and general manager of the Canadian organization, known at present as Spruce Falls Company. An expenditure of between $12,000,000 and $15,000,000 is proposed in connection with the building of a construction or logging railway, 50 miles in length, from Kapuskasing to Smoky Falls on the Mattagami River, the erection of a power plant of 50,000 hp. capacity and a 500-ton newspaper mill. The company's limits consist of 3,000 square miles acquired from the Ontario Government on September 10 last, besides 1,700 square miles held already. These are located both north and south of the C. N. R. line in the vicinity of Kapuskasing.

It was necessary to build a construction railway in order to haul equipment for the power plant to Smoky Falls. This railway will require an expenditure of, at least, $500,000, and it will probably be used afterward as a logging railway. The company already has a sulphite mill of 115 tons daily capacity at Kapuskasing. The 500-ton paper mill that will be erected will give the Spruce Falls Company an output equal to the present capacity of Abitibi. It is proposed to finish the railway within about eight months. Erection of a power plant and the news print mill will commence immediately thereafter. It will probably take between 18 months and two years to complete the power plant.

The Kimberly-Clark Company has been in the paper business for 53 years. This enterprise is not associated in any way with the Backus interests with which Mr. Black severed connections in March, 1925. This newsprint development will mean a great deal of traffic on the C. N. R. and T. & N. O. lines and railway construction operations are commencing immediately.

Lew Glickman Guilty of Concealing Assets

Lew Glickman, president of the De Lux Paper Company, Inc., of New York City, a jobber in paper, has been found guilty of criminally concealing the assets of the bankrupt corporation. The case was tried in the United States Court before Judge Johnson and a jury on January 28. In finding Glickman guilty the jury recommended clemency on account of the fact that he is crippled in both legs. The court followed the jury's recommendation and imposed a suspended sentence. A petition in bankruptcy was filed against De Lux Paper Company, Inc., June, 1925. Immediately thereafter the creditors appointed a committee with Charles W. Sachs, of the Continental Paper and Bag Mills Corporation as chairman, who was later appointed trustee in bankruptcy. The creditors' committee retained Joseph A. Arnold, of 22 William street, as its counsel and Julias Jonas as accountant to investigate the affairs of the bankrupt. As a result of such investigation the facts were presented to United States Attorney Buckner. The Grand Jury returned an indictment against Glickman and the bankrupt for fraudulently concealing the assets and it was upon this charge that the defendants were brought to trial.

Sales Changes in Diamond State Fibre

BRIDGEPORT, Pa., February 1, 1926.—The Diamond State Fibre Company has announced changes in its Eastern sales organization. C. M. Bogert is now district manager for the state of Connecticut with offices at South Norwalk.

W. R. Elsenhans, formerly of the Bridgeport home office staff, is now district manager at Philadelphia with offices at 822 Drexel Building.

Mr. Bogert and Mr. Elsenhans will be in charge of the sales of both Diamond Fibre and Celoron in their respective districts.

Satisfaction in Sizing

THE effect of sizing upon the quality of paper is far reaching. In fact it is considered a "key" process.
The recognized importance of sizing therefore necessitates the use of a dependable size — such as Kalbfleisch Rosin Size has invariably proved itself to be.
Equally valuable is Kalbfleisch service. The close contact of these engineers with sizing processes has given them a fund of knowledge that is gladly placed at your disposal. They will cooperate in every way to secure the best results from the De Cew patented sizing process in conjunction with Kalbfleisch Chemicals.
Their time is yours—please feel free to call upon them—they welcome the opportunity to confer with you.

The KALBFLEISCH Corporation

200 Fifth Ave., New York

Factories: Erie, Pennsylvania
Brooklyn, New York
Kalamazoo, Michigan
Elizabeth, New Jersey
Chattanooga, Tennessee
Waterbury, Connecticut

Section of the
Technical Association of the Pulp and Paper Industry
AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.
Conducted by W. G. MacNAUGHTON, Secretary

Fresk Digester Filler

By W. G. MacNaughton

A number of mills in Sweden and Finland are using a special apparatus, the invention of Albert Fresk, engineer at Robertsfors (Sweden) Sulphite Mill, for filling the digesters more uniformly and completely with the chips.

What the Equipment Consists of

The equipment consists of a fan which circulates air with considerable velocity through the digester while it is being filled with chips. Between the force of the air current and the action of the conical distributor set in the end of the discharge pipe the chips are apparently whirled into every part of the digester. The effect is also said to be that they are deposited on their sides thereby taking less space.

At the Robertsfors mill direct cooking digesters are used, of 115 cubic meter capacity. A test of the usual method of filling and steaming the chips for 10 minutes showed that it was possible to introduce 83 cubic meters of acid. While using the Fresk apparatus this quantity of liquor fell to 77 cubic meters, showing that the digesters were more completely filled with chips. The filling time for the chips using the Fresk method was 45 minutes, which was 10 minutes more than by the old way. It included, however, the time to instal and dismount the apparatus.

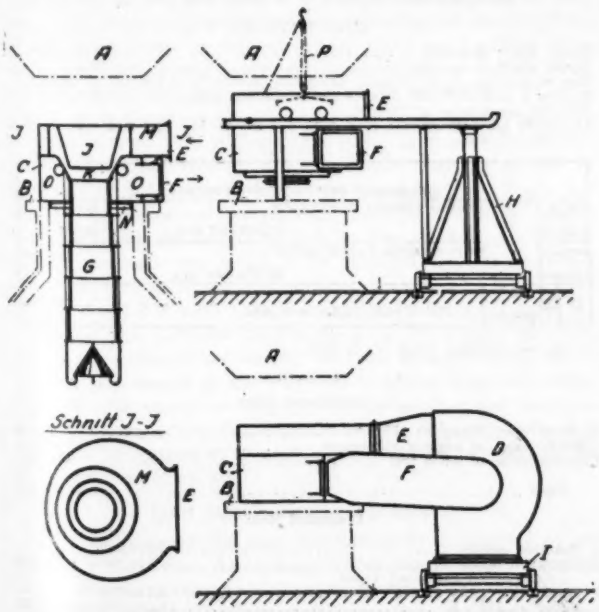


Diagram of Fresk Digester Filler

Fresk Digester Filler Installed

Average Yield Increased

The average yield per cubic meter of digester space was increased from 78 to 102 kilograms of air dry (90 per cent) pulp.

These figures are taken from a paper by Mr. Fresk before the Swedish Association of Cellulose Engineers.

I saw the apparatus in two mills, one of which was using it on sulphite and the other on sulphate. Apparently these mills were not fully convinced of its practicability. At the one on sulphate a difficulty was encountered in that the charge was packed so tightly that there was trouble in blowing the digester.

American Appreciation

Whether or not it would be applicable to American quick cook practice is an open question. If, however, even with a somewhat longer filling time, it is possible to get a more uniform digester content and something approaching a 30 per cent increase in yield per digester, it is well worthy of investigation. It is being introduced into this country by Erik Serlachius of G. A. Serlachius A/B., Manta, Finland, who is making an extended visit here.

Heat Problems in the Sulphate Mill a Review

By K. M. Thorsen, Chemical Engineer, G. D. Jenssen Co., New York

The recovery of the chemicals used in digesting wood for sulphate pulp is connected with the combustion or the organic material brought in solution. The black liquor consequently contains enormous quantities of heat units and for several years the proper utilization of this heat has been the concern of the engineers in this industry.

The soda process was the first successful method of pulping wood and it was soon found that the river which is usually at hand to receive anything not wanted on the land was not the proper place for spent liquor. The chemicals were too expensive to be wasted and consequently it was found necessary to recover them if the process was to continue. The efforts at the time were concentrated on finding methods requiring as little work as possible and which would reduce the chemical losses. The rotary incinerator which was developed, was found very suitable for converting the heavy viscous liquor to a material that would burn readily and its adoption resulted in a considerable saving of labor. In this way, however, the combustion of the material cannot be completed and only coke product is obtained from which the chemicals are extracted.

The sulphate process was developed later with the aim of using the cheaper sodium sulphate instead of the rather expensive soda ash for replacing the losses that necessarily occur in the process. Digestion with such liquor resulted in a higher yield of pulp and a fiber that in quality compared with what was obtained by cooking with straight sodium sulphide liquor. This change of practice made it possible to complete the combustion in some sort of a smelting furnace since the melting point of the chemicals is lowered considerably by the introduction of sulphide and sulphate.

It was soon found also that considerable economy could be effected by utilizing the heat in the combustion gases. In the soda mill a boiler was placed behind the rotary and in the sulphate mill a disk evaporator was similarly used. In recent years with rising fuel costs and keen competition, the necessity for methods of production of the lowest possible cost, have induced a closer study of the heat problems in the manufacturing process and this has led to further reductions of the steam requirements of the mill. The possibilities that in a sulphate mill, the whole steam demand of the process may be covered by the heat generated in the recovery room, have been disclosed, and it is only a question of time when the difficulties that stand in the way for achieving this ideal will be completely overcome.

The combustion of a fuel is done either directly or by gas generation. The former method, where the material is as far as possible burned in one step, is used almost universally and it is only on account of special reasons that preference is sometimes given gas generation. The aim then is to convert as much as possible of the fuel into combustible gases which later in the process are burned in some other place. Reasons for choosing this method of combustion might be several. For instance, it might be desired to localize the heat and to utilize the radiant energy developed or to have a wide margin inside with which the combustion may be quickly regulated. It might be desired to avoid mixing the material that is heated, with the ash that results from the combustion, or the nature of the ash that is formed makes it impossible to burn the fuel on a grate, etc.

In the case of burning black ash it is evident that the latter method is desirable if not a necessity and therefore it was judged that the old method of firing the black ash was right in principle. The work consequently was centered on improving the efficiency of the existing methods rather than to try to develop new ones. The problem connected with this work has received a very careful study in Scandinavia which resulted in the development of the so-called "S-S" system.

The S-S System

Two of the foremost Swedish cellulose engineers, S. Sandberg and G. Sunblad developed the system and their work resulted in the building of a mill according to their ideas, now more than ten years ago. The results of the operation of this plant proved their calculations to be correct and in practically all the new sulphate mills built in Scandinavia since that time their principles have been followed, with modifications to suit local conditions. Sunblad's publications on the subject are very instructive and of great interest. I shall here take the liberty of translating some of his calculations and in order to make them understandable, it will be necessary to give a brief description of the operation in a mill of the S-S system.

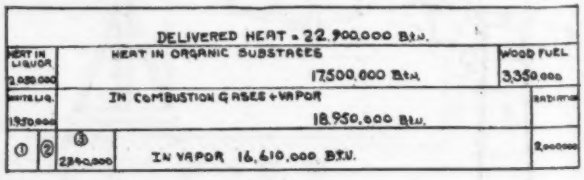
The wood is treated in a stationary digester where the early stage of the cooking is done indirectly to about 40 lb. gauge, after which direct steam is used for bringing the digester up to pressure. The digester is relieved in the early stage to drive off the air but principally for recovery of turpentine. When the cook is completed the pressure is brought down to about 50 lb. when the digester is blown in the usual way. The considerable quantity of heat released at this step is used for preheating the cooking liquor and for warming water to be used in the process. In the diffuser the black liquor is separated with the least possible dilution. The portion of the black liquor not circulated in the cooking process is preheated before it enters the evaporators in a section of the economizer placed behind the waste heat boilers in the recovery. The evaporator is a triple or quadruple effect machine of the high pressure type and the exhaust steam from the last effect is used on the machine for drying the pulp.

TABLE 1

HEAT BALANCE IN THE RECOVERY ROOM
THE OLD METHOD
All figures refer to 2,000 lb. of Kraft Pulp 90% air dry.

SUPPOSITIONS:

Black liquor delivered ..... 15,900 lb. 175° F.
Water which it contains ..... 12,750 lb.
The combustion of the organic substances results in 1,180 lb. of water.
Making a total of 13,930 lb. of water in the flue gases
The flue gases leave at 230° F.
The black ash furnaces are fired with 475 cu. ft. hog fuel and sawdust with 50% moisture.



Scale—1 million B.t.u. = ¼ inch.

BALANCE

Introduced Heat

	B.t.u.
In weak black liquor at 175° F.	2,050,000
Calorific value of organic substances	17,500,000
Calorific value of wood fuel	3,350,000
Total	22,900,000

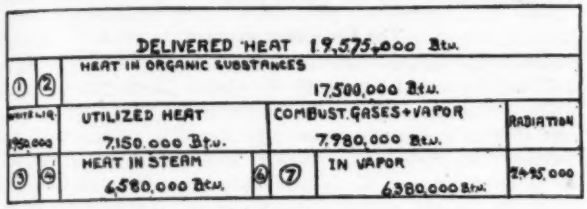
Consumed Heat

		B.t.u.
1. Reaction energy	1,240,000	
2. Energy in smelt	710,000—	1,950,000
Combustion gases and vapor:		
3. Combustion gases at 230° F.	2,340,000	
Vapor at 230° F.	16,610,000—	18,950,000
Radiation losses		2,000,000
Total		22,900,000

TABLE 2
HEAT BALANCE IN THE RECOVERY ROOM
THE S-S METHOD
All figures refer to 2,000 lb. of Kraft Pulp 90% air dry.

SUPPOSITIONS:

Black liquor delivered ..... 7,070 lb. at 212° F.
Water, which it contains ..... 3,920 lb. (77% of total)
The combustion of the organic substances results in 1,180 lb. of water
Making a total of ..... 5,100 lb. in flue gases
The flue gases leave at ..... 300° F.
In the economizer 570,000 B.t.u. are utilized for preheating liquor for the evaporators.
The boiler feed water is received at 200° F.
Steam generated in waste heat boilers, 5,500 lb. at 170 lb. sq. in. gage.



Scale—1 million Btu. = ¼ inch

BALANCE

Introduced Energy

	B.t.u.
1. In black liquor, 7,070 lb. at 212° F.	1,150,000
2. In feed water	925,000
Calorific value of organic substances	17,500,000
Total	19,575,000

Consumed Energy

		B.t.u.
3. Reaction energy	1,240,000	
4. Energy in smelt	710,000—	1,950,000
Utilized heat:		
5. Heat in steam	6,580,000	
6. In pre-heated liquor	570,000—	7,150,000
Combustion gases and vapor:		
7. In combustion gases at 300° F.	1,600,000	
8. In vapor at 300° F.	6,380,000—	7,980,000
9. Radiation losses, etc.		2,495,000
Total		19,575,000

The Old System

The operation of the old type sulphate mill is familiar to everybody. In the particular case that is analyzed, the complete evaporation is done in the disk evaporator and the additional fuel that is needed for this phase of the operation is supplied in the form of wood fuel in the smelter.

Table 1 shows a heat balance of the recovery room of the old type mill. The heat available in the organic substances is a very large item which compares with the heat content of about 1250 lb. of coal, other items on this side of the sheet are 2 million B.t.u. in the black liquor that enters the system and 3.35 million B.t.u. from the wood fuel that is needed to cover the deficit.

Looking at the other side of the balance sheet we find one considerable item of 18.95 million B.t.u. going up the stack and that in spite of the fact that the gas temperature is as low as 230° F. Two million B. t. u are stored in the dissolving tank liquor and another two million are lost through radiation. From the figures it is shown that the system as such is very efficient. A subdivision of the stack loss which is an incorrect way of describing it since the heat going this way could not very well be reduced any further shows 2.34 million B.t.u. contained in the gases from the combustion and 16,610,000 B.t.u. in the vapor. This latter item constitutes more than 72 per cent of the total of all the heat that is required. The source of this vapor is, to a very large percentage, the water that carries the organic and inorganic matter and it is evident that any saving that might be made in this step of the process must be reached by a more efficient method of reducing the black liquor to black ash.

Heat Distribution in S-S System

Table 2 illustrates the heat distribution in a recovery of the modern S-S system. As in the previous case the heat contained in the organic substances is the major item on the debit side of the balance sheets. The heat carried into the system by the black liquor is reduced with the volume to about one-half of what it is in the old type mill; the heat in the feed water appears as a new item. The total heat delivered to the system is about 19.6 million or practically the same as in the previous case if the value of the extra fuel is subtracted.

On the credit side of the sheet, however, the story is quite different. The heat in the dissolving tank liquor remains unchanged and the radiation losses but slightly larger or 2.5 million B. t. u. The large difference occurs in the quantity of heat carried up the stack, which item is now reduced to 7.98 million B.t.u. or about 42 per cent of what is the case in the old type mill and that in spite of the fact that the stack temperature now is figured considerably higher. A new item appears here which shows 7.15 million B.t.u. utilized heat of which 6.58 million is stored in 5,500 lb. of steam and 0.57 million absorbed by the black liquor in preheating it before it is sent to the evaporators. A subdivision of the stack loss shows 1.6 million B.t.u. in the gases from the combustion and 6.38 on in the vapor which item now is reduced from 72 to 32 per cent of the total of the available heat. Even so, the item is still a large one and invites attempts to further reduction. Better results have also been reached in practice and later installations produce 6200 lb. of steam per ton of pulp in the recovery room.

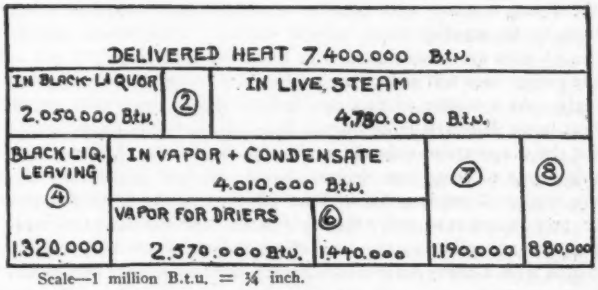
When the black liquor is concentrated still higher it leads to an increase of the sublimation losses and until this drawback has been overcome it is not advisable to look for further saving by raising the concentration of the liquor before sending it to the rotary.

From the balance sheets we find that the change in the recovery room practice does away with the outside fuel in the recovery room and besides leaves an excess 5500 lb. of steam. However, this change in the process necessitates the use of an evaporator and in order to get the whole picture it becomes necessary to see what use

TABLE 3
HEAT BALANCE OF QUADRUPLE EFFECT EVAPORATORS
THE NEW METHOD
All figures refer to 2,000 lb. of Kraft Pulp 90% air dry.

SUPPOSITIONS:

Black liquor delivered ..... 15,900 lb.
The liquor contains, solids ..... 3,150 lb.
water ..... 12,750 lb.
In the machine is evaporated, water ..... 8,830 lb.
The evaporation is done under high pressure.
The vapor from the last effect is utilized for drying of pulp.
Pressure of vapor on last effect, 12 lb. per sq. in. gage.
Steam pressure on I effect, 92 lbs. per sq. in. gage.
Condensate from II, III and IV effect is used for heating of liquor.
The temperature of the black liquor is raised 20° C. in the recovery room economizer.



Scale—1 million B.t.u. = ¼ inch.

BALANCE

Introduced Heat

Scale—1 million B.t.u. = ¼ inch.

1. In weak black liquor at 175° F.	2,050,000
2. From black liquor economizer	570,000
3. In steam: 4,000 lb. at 145 lb. sq. in.	4,780,000
Total	7,400,000

Distribution of Heat

		B.t.u.
4. In black liquor leaving evaporator		1,320,000
In vapor and condensate:		
5. Vapor, 2,210 lb. at 12 lb. gage	2,570,000	
6. Condensate, 6,630 lb. at 250° F.	1,440,000—	4,010,000
7. Live steam condensate, 4,000 lb. at 330° F.		1,190,000
8. Radiation losses and leakage		880,000
Total		7,400,000

TABLE 4

HEAT BALANCE IN OLD TYPE SULPHATE MILL

(Theoretical figures)

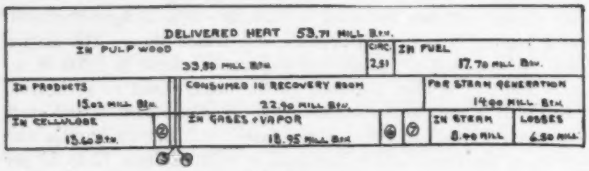
All figures refer to 2,000 lb. of Kraft Pulp 90% air dry.

SUPPOSITIONS:

Consumption of wood	4,400 lb.
Steam requirements: Cooking	3,250 lb.
Drying	3,250 lb.
Miscellaneous	500 lb.
7,000 lb. which has to be generated in the boiler house.	

In addition, 47.5 cu. ft. of wood refuse is needed to complete the evaporation in the recovery room.

Fuel: Wood refuse containing 50% moisture.
Cooking: In stationary digesters.



Scale—1 million B.t.u. = ⅛ inch.

BALANCE

Introduced Heat

		B.t.u.
Pulp wood, 4,400 lb.		33,500,000
Fuel: 252 cu. ft. wood fuel, 50% moisture		17,700,000
Inside process is circulated:		
In black liquor	2,050,000	
Condensate from indirect cooking	460,000—	2,510,000
Total		53,710,000

Distribution of Heat

		B.t.u.
1. Heat in cellulose	13,600,000	
2. By-products	1,420,000—	15,020,000
3. Liquor losses		530,000
4. Reaction heat in digester		360,000
In recovery room is consumed:		
5. In combustion gases and vapor	18,950,000	
6. Radiation losses	2,000,000	
7. In white liquor	1,950,000—	22,900,000
For steam generation:		
8. In steam	8,400,000	
9. Losses	6,500,000—	14,900,000
Total		53,710,000

is made of the steam generated, and how it goes towards supplying the demand of the mill as a whole.

Heat Balance of Evaporator

In Table 3, giving the heat balance of a quadruple effect high pressure evaporator the steam requirements for the machine is found to be 4000 lb. per ton which would leave an excess of 1500 lb. of steam for other process work. But the evaporator supplies the drying machine with 2210 lb. of steam which otherwise would have to be supplied from outside sources. Considerable quantities of heat are also contained in the condensate, which if put to the proper uses will reduce the load on the boiler room correspondingly. As a matter of fact this balance sheet shows more useful heat being delivered from the machine than is in the steam needed for the evaporation, only the quality has been lowered. How near this comes to being true depends largely on how successfully this low quality steam is utilized. That this part of the process cannot be pronounced as an entire success is due to the fact that at the temperature prevailing in the first effect the tubes are very rapidly coated with a heavy scale which is very hard to remove and makes it necessary to equip the machine with an extra first effect to insure continuous operation.

Heat Balance of Old Type Mill

Table 4 shows a heat balance of an old type sulphate mill as a whole. The figures are theoretical and the toal steam consumption of 7,000 lbs. per ton of pulp is exceeded in most cases. In addition to the steam consumed, there is the deficiency in the recovery room that also is covered with foreign fuel., i. e. about 50 cu. ft. of hogfuel and sawdust per ton of pulp since an evaporation of black liquor is done direct.

Heat Balance of Early S-S Mill

The balance sheet in Table 5 is for one of the earlier mills built according to the S-S system and is based on actual operating figures over a long period. This mill is equipped with a triple effect high pressure evaporator. The total steam consumption of the mill is 11,700 lb. per ton of pulp. However, only 3,250 lb. of this total is supplied from an outside source which figure could be further reduced by employing a quadruple effect evaporator and reducing the steam requirements of the driers by using the most effective methods for dewatering the pulp as it leaves the wet end. In one of the later mills the average fuel consumption for a period of one year was slightly less than 250 lb. of coal or its equivalent in wood fuel per ton of pulp.

The Explosion Process

Another and entirely different method of the recovery of the alkali has been developed by H. K. Moore of the Brown Corportion. This company's sulphate mill at La Tuque, P. Q., is equipped with a recovery room built according to the Moore's principles. Very little is known about the process, but since it has been in operation now for several years it must be judged successful. In a paper read at a meeting of the American Institute of Chemical Engineers, in 1920, the inventor gives his reasons for trying to find a new working method for the sulphate mill recovery and gives the figures that serve as a basis for his devices. From the article, one can understand that in this new system the disk evaporator and the rotary furnace are eliminated. The black liquor is evaporated in a mulitple effect evaporator to a concentration where it contains about 50 per cent solids. Into the evap-

TABLE 5

HEAT BALANCE IN SULPHATE MILL SYSTEM S-S

(Operating Figures)

All figures refer to 2,000 lb. of Kraft Pulp 90% air dry.

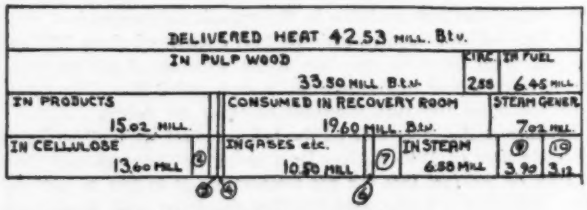
SUPPOSITIONS:

Triple effect evaporators.
Wood consumption ..... 4,400 lb.

STEAM REQUIREMENTS:

Cooking	3,250 lb.	of which is generated in: Recovery room	5,500 lb.
Evaporation	4,700 lb.	Evaporators	2,950 lb.
Drying	3,250 lb.	Boiler room	3,250 lb.
Miscellaneous	500 lb.		
	11,700 lb.		

Fuel: 92 cu. ft. hog fuel and sawdust with 50% moisture.
Cooking: In stationary digesters.
Drying: With vapor from last effect at 12 lb. sq. in. gage.



Scale—1 million B.t.u. = ⅛ inch.

BALANCE

Introduced Heat

		B.t.u.
Pulpwood, 4,400 lb.		33,500,000
Fuel: 92 cu. ft. wood refuse, 50% moisture		6,450,000
Inside process is circulated:		
Condensate from indirect cooking	460,000	
Condensate from evaporators	970,000	
Heat in liquor	1,150,000—	2,580,000
Total		42,530,000

Distribution of Heat

		B.t.u.
1. Heat in cellulose	13,600,000	
2. In by-products and gases	1,420,000—	15,020,000
3. Liquor losses		530,000
4. Reaction heat in digester		360,000
In recovery room is consumed:		
5. In combust. gases, vapor and radiation	10,500,000	
6. Abs. in black liquor economizer	570,000	
7. In white liquor	1,950,000	
8. In steam, 5,500 lb.	6,580,000—	19,600,000
9. In generated steam, 3,258 lb.	3,900,000	
10. Losses in boiler room, etc.	3,120,000—	7,020,000
Total		42,530,000

orated black liquor is mixed the salt cake that is needed to cover the losses in the process and the mixture is sprayed into a furnace of special design where it is completely burned. A heat balance given by Moore proves that the heat available in the organic matter does not quite take care of the requirements of the process at the temperature prevailing in the furnace. The most suitable fuel to cover this deficiency was found to be producer gas which, besides furnishing the radiant heat that is needed to complete the evaporation of the liquid, also serves as a reducing agent in the salt cake. A direct method of firing is probably employed in this case and that may be the reason why proper reduction of the salt cake is not obtained from the action of the carbon in the liquor. The gases pass through a boiler where the temperature is lowered to 500° F. before they leave the recovery room. Mr. Moore's estimate shows that under the given conditions there are 2,748 B.t.u. available for steam generation per pound of dry substance which figure is considerably larger than the one reached in the mill represented by the balance sheet in Table 5, on account of the higher concentration of the black liquor.

The gases leaving the recovery room carry large quantities of chemicals, probably sublimed in the furnace, and it was found necessary to use an electric precipitation system to recover these chemicals.

Conclusion

The aim of this article is not to show any definite method of operating a sulphate mill but rather to prove that the possibilities for a mill to take care of its own demands for process steam are existing. How far to go towards the ultimate goal depends on local conditions. Each case has its own specific conditions which must be given careful consideration before a definite scheme is outlined. The aim of the engineer shall not only be to produce excellent operating figures but these figures must be attained in a manner so that the final cost of the product is a minimum.

Measurement of Materials

In a concise pamphlet, Toledo Scales Company, Toledo, Ohio, discusses the unexplained differences between the quantity of raw materials purchased and the amount of finished product made therefrom.

These differences, which usually must be charged off, are to a considerable extent traceable to errors in the measurement of materials.

The lack of opportunity on the part of the accounting department to detect and disclose errors in these figures prevents, of course, any criticism of the equipment, methods and care used by the men out in the plant, in obtaining the figures, and our investigations generally show that the conditions under which these figures are obtained do not compare favorably with the care used in handling these figures after they have been received by the accounting department.

To Make Bendonite Cartons

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., January 30, 1926.—W. P. Bennett of Toronto, who is a former president of the Canadian Paper Box Manufacturers' Association and also president of the Rudd Paper Box Company, along with E. Victor Donaldson, secretary-treasurer of the Rudd Paper Box Company, has organized Canada Cartons, Limited, which has begun the manufacture of cartons for food products from an entirely new substance known as "Bendonite." It is a development of the Gilsonite fabric and is a laminated board made by a new process, which resists moisture, grease, dust, etc., and yet is very light and strong. "Bendonite" caddies will be turned out by the new industry for all varieties of food. Canada Cartons is a distinct company from the Rudd Paper Box Company, and Messrs. Bennett and Donaldson will continue to manage the Rudd Paper Box Company as heretofore.

Boivin Stock Regulator

The Boivin Stock Regulator for paper machines is manufactured in various sizes to suit the tonnage of the particular machine on which it will be installed. It is of simple design, constructed entirely of brass or copper, and readily attached to regular stuff box, if in good condition, otherwise the purchaser provides a new one.

By reference to the sketch, you will note that the stock level or head in compartment shown is controlled in the usual manner by an adjustable dam and overflow and this compartment is provided with a conical shaped outlet of brass, smooth finished, through which stock must pass to paper machine. Suspended in this outlet is a conical shaped gate and attached to it above a float, both of which are hollow and constructed of sheet copper. Both are mounted on a rod, the upper end passing through and attached to a yoke, the whole assembly being counterbalanced by a lever and weight, and adjustable upward or downward by a hand wheel and

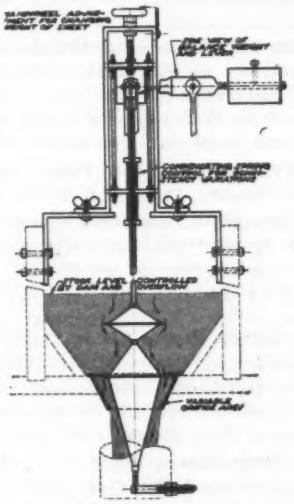


DIAGRAM OF BOIVIN STOCK REGULATOR

screw through which the position of the conical gate is determined. The rod is loosely supported in the yoke by sensitive compensating springs, one above and one below the yoke, tension being controlled by lock nuts. This permits a further limited, upward or downward movement of rod, float and cone. The lower end of rod is supported to prevent side sway.

Thus it will be noted that the volume of stock passing through the outlet is controlled by the conical gate, raising of which increases the orifice area, allowing larger volume to pass and the lowering of which reduces the orific area, decreasing the volume.

The conical gate is first adjusted to the required volume of stock which, together with weight of sheet, will remain constant so long as the consistency remains uniform. Any changes in consistency are instantly felt and compensated for by the pressure of stock on the conical gate and float acting upon the sensitive compensating springs. If the stock becomes heavier, pressure will be exerted on the float and cone, causing a downward movement, thus restricting the area of the outlet and a less volume of heavy stock will pass. If the stock becomes thin, its action on the float will slightly raise the cone, increasing the area and permitting a larger volume of thinner stock to pass, thus maintaining at all times a uniform weight of sheet.

The Boivin Stock Regulator is built and sold in the United States by the Glens Falls Machine Works, Glens Falls, N Y., and in Canada by the Victoria Foundry Company, Ltd., Ottawa, Ont.

The MacAndrews & Forbes Company, Camden, N. J., manufacturer of wallboard products, has arranged for an increase in capital to 600,000 shares of stock, no par value, for general expansion and financing.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

CLARENCE J. WEST, CHAIRMAN

Paper Specialties

Marine Production of Silk Paper in Japan. Anon. Wochbl. Papierfabr. 56, 97 (June 13, 1925). Japanese papers are characterized by their unusual fiber length and strength, as well as softness. Bast fibers, manila hemp and wood pulp serve principally as the raw material, which is pulped in a beater and subsequently treated in the usual manner on the machine. The sheet is made transparent by the addition of a mucilaginous substance called "Mori," which is made from koshokuki roots. The use of this material is described.—J. L. P.

Embossing Paper and a Process for Manufacturing Cigarette Mouthpieces From It. Firma Wickels Metallpapier-Werke. Ger. pat. 413,910. Papierfabr. 23, 456 (July 12, 1925). Embossing paper and leaf metal are firmly joined at a high temperature and converted into cigarette mouthpieces by a suitable machine.—J. L. P.

Manufacture of Paperboard and Paper from Peat. O. Schneider. Ger. pat. 396,329. Papierfabr. 23, 456 (July 12, 1925). White peat, containing grass, is screened without washing. The larger particles are disintegrated in a beater or kollergang, and the smaller ones are later added to the mixture. The stock so produced is converted to paper or paperboard in the usual way.—J. L. P.

Manufacture of Carbon Paper. Chem. Fabrik Adolf Heinemann. Ger. pat. 413,714; addition to 405,842. Papierfabr. 23, 476 (July 19, 1925). As solvents or dispersing agents for the dyes, in the manufacture of carbon paper, free hydrogenated fatty acids, fats, oils or mixtures of these, are used.—J. L. P.

Manufacture of Dense, Strong Paper. C. G. Schwalbe. Ger. pat. 414,045. Zell. U. Papier 5, 264 (July, 1925). Treatment of fibrous material with acids, organic acids in particular, before beating, produces a swelling effect, resulting in a shortening of the beating time, and accelerates the formation of slime or mucilage which is essential to the production of a dense, strong paper.—J. L. P.

Manufacture of Strong Papers on the Paper Machine. M. Freitag. Ger. pat. 416,646. Zell. U. Papier 5, 264 (July, 1925). Different sheets of uniformly different thicknesses are manufactured by a suitable arrangement of the wet end of the machine.—J. L. P.

Manufacture of Paper From Waste Leather. J. Samuel. Ger. pat. 415,464. Zell. U. Papier 5, 264 (July, 1925). An aqueous mixture containing finely disintegrated leather is allowed to evaporate on a flat surface. The resulting sheet possesses the properties of paper and may be parchmentized or otherwise transformed by the addition of alkalies, acids, etc.—J. L. P.

Wood Fiber Board. J. K. Shaw assignor to B. C. Dahlberg. U. S. pat. 1,534,088, April 21, 1925. The board contains coarse, fine and intermediate sized fibers disposed in layers. The board has a specific gravity of less than 0.4 and is provided with a number of holes having ragged surfaces adapted to receive and anchor a plastic substance.—A. P.-C.

Waterproofed Fibrous Material. A. L. Clapp assignor to the Flintkote Company. U. S. pat. 1,533,100, Apr. 14, 1925. Wood pulp, rags or other fibrous material, is mixed with an aqueous bituminous emulsion and with an alkaline protein solution and a metal salt such as aluminum sulphate is then added, which is capable of forming a gelatinous hydrate precipitate, so that the emulsion is broken down and the bituminous material is deposited on the fibers. The product is suitable for making raw felt or boxboard sheets.—A. P.-C.

TECHNICAL SECTION, PAGE 39

Fiber Board of Felted Interlaced Fibers. J. K. Shaw assignor to C. F. Dahlberg. U. S. pat. 1,544,042, June 30, 1925. The fiber board is built up of layers of different kinds of fibers, a portion of the fibers of each layer being interlaced with a portion of the fibers of the adjacent layers, and a portion of the fibers carrying natural pithlike protuberances serving as entangling agents between the fibers.—A. P.-C.

Paper Board. L. J. Spaeder. U. S. pat. 1,535,503, Apr. 28, 1924. Double-faced corrugated board is stiffened along the edge by means of a sheet of paper or board with square-turned corners forming a flat edge of the thickness of the corrugated board.—A. P.-C.

Composition Board. J. E. Parsons. U. S. pat. 1,543,394, June 23, 1925. A sheet of flexible fibrous material such as felt or burlap is immersed in a heated liquid composed of glue, shellac, resin and water; it is then removed, dried, pressed and coated with a plastic mixture of glue, whiting, resin and shellac.—A. P.-C.

Waterproofing Sheet Material for Roofing, Etc. L. Kirschbraum. U. S. pats. 1,537,949 and 1,532,712, April 7, 1925. A suitable design is printed on one side of the paper with a liquid containing mineral oil mixed with rosin, and the resultant design is visible on both sides of the paper without its having to be held up to the light.—A. P.-C.

Rendering Paper Impervious. W. L. Wright assignor to Oswego Falls Corporation. U. S. pat. 1,542,539, June 16, 1925. A casein and dichromatic composition is incorporated with the paper stock, and as the sheet is passed over the driers it is subjected to the action of ultra-violet light.—A. P.-C.

Waterproof Felted Composition. L. Kirschbraun. U. S. pat. 1,542,557, June 16, 1925. Burlap or other open-mesh fabric backing is fed over a paper machine and united with fibrous stock and with a waterproof pitchy binder.—A. P.-C.

Method of Dry-Crinkling Paper. K. Wandel assignor to Arkell Safety Bag Company. U. S. pat. 1,534,622, Apr. 22, 1925. The paper is passed over a roll to which it is made to adhere by means of suction, and is crinkled by removing it from the roll by means of a doctor.—A. P.-C.

Water-Resistant Felt and Process of Making the Same. A. L. Clapp. U. S. pat. 1,529,299, Mar. 10, 1925. Cotton linters are beaten to disintegrate the fibers and mixed with rosin size and with alum in excess of that required to precipitate sodium resinate from the size. Waste hair from tanneries is mixed with the stock and the excess alum present serves to neutralize the lime in the hair. A further quantity of rosin size is then added to the mass and aluminum resinate is precipitated by the addition of more alum. The material is felted and sheeted on a paper machine.—A. P.-C.

Method of Producing Configured Paper. H. C. Orchard assignor to Orchard Paper Company. U. S. pat. 1,532,712, Apr. 7, 1925. A suitable design is printed on one side of the paper with a liquid containing mineral oil mixed with rosin, and the resultant design is visible on both sides of the paper without its having to be held up to the light.—A. P.-C.

Felted Waterproof Sheets. L. Kirschbraun. Can. pat. 245,713, Dec. 30, 1924. U. S. pat. 1,536,399, May 5, 1925. An emulsion is prepared by adding bitumen in a fluid state to a mixture of clay and water during agitation and at a temperature such that the bitumen will be dispersed without substantial coalescence and this emulsion is incorporated with a fibrous plup in an aqueous vehicle. The mixture is then felted on a paper machine.—A. P.-C.

Felted Sheet. L. Kirschbraun. Can. pat. 245,714, Dec. 30, 1924. A multi-ply sheet of fibrous material contains an inner body

portion of fibrous stock and coalesced bitumen and outer plies united to the body portion—A. P.-C.

Paper-Like Product. K. L. Moses. Can. pat. 247,418, Mar. 10, 1925. A sheet or web of high porosity and composed of relatively long, loosely matted fibers is impregnated with a rubber compound.—A. P.-C.

Producing Waterproof Sheets from Fibrous Material by the Use of Sulphur. F. H. Coyne. U. S. pat. 1,537,752, May 12, 1925. The paper is passed over a suitable support, and sulphur which has been previously heated until it reaches a temporarily viscous adhesive condition, is applied to the paper. While the sulphur is still in an adhesive condition a second sheet of paper is applied and the united sheets are subjected to conditions which transform them into an elastic and temporarily flexible fabric.—A. P.-C.

Leather Substitute. K. L. Moses. Can. pat. 247,482, Mar. 10, 1925; U. S. pat. 1, 535, 940, Apri. 28, 1925. A web of long-fibered porous paper or similar material is impregnated with rubber, thoroughly wetted, and subjected to a rubbing action to produce a material somewhat resembling chamois or other leathers, and which, by suitable surface treatment, may be prepared for book binding, automobile tops, upholstery, etc.—A. P.-C.

Waterproofing Material. L. Kirschbraun. Can. pat. 245, 711 Dec. 30, 1924. A bituminous waterproofing material in finely divided form is coated with a protective film, precipitated on a fibrous stock which is then formed into sheets.—A P.-C.

Leatherboard Felt. F. V. Chaney assignor to Chaton Fibre Company. U. S. pat. 1,541,922, June 16, 1925. A leatherboard felt comprising 40 per cent of leather fiber, 20 per cent mixed paper, 30 per cent coarse animal or vegetable fiber, and 10 per cent of binder.—A. P.-C.

Machine for Coating, Coloring or Otherwise Treating Paper. E. Phol, U. S. pat. 1,542,835, June 23, 1925. In a machine for striping paper, the color applying device consists of a trough divided into compartments. A roller journalled in the trough has a number of disks corresponding to the number of compartments into which the trough is divided, and all the compartments containing the same color are connected so that the color solution need be fed to only one of them.—A. P.-C.

Method and Apparatus for Preparing Coated Blanks for Conversion Into Boxes. H. S. Labombarde. U. S. pat. 1,536,-801, May 5, 1925. Blanks for the manufacture of waterproof boxes are first waxed, and then those portions which are to receive glue are subjected to the action of heat. The blanks are then rapidly chilled before the heat has time to affect the opposite surfaces of the heated portions.—A. P.-C.

Bituminous Composition for Flooring and Other Uses. L. Kirschbraun. U. S. pat. 1,506,371, Aug. 26, 1924. A mixture suitable for use as a print or as a floor covering material is prepared by mixing leather waste, wood pulp or other fibrous material with an aqueous emulsion comprising a mixture of asphalt, wax tailings and rosin (or other bituminous binder of similar character), with colloidal clay and water in the external phase.—A. P.-C.

Wood Substitute from Waste Fibrous Materials. I. Naylor. U. S. pat. 1,528,224, Mar. 3, 1925. Vegetable fibrous waste, e. g., corn stalks, rice hulls, waste paper or bagasse, is reduced to small particles and these are impregnated with sodium silicate solution, brought to a mud-like consistency, and kneaded with addition of sodium silicate to form a dough-like material which is freed from gases and permitted to solidify.—A. P.-C.

Boards

Process of and Apparatus for Making Wall Board. P. B. Hudson. U. S. pat. 1,508,973, Sept. 16, 1924. The layer of stock which is formed on the mould of a one-vat cylinder machine is blown on to the couch roll, which is not in contact with the cylinder. The distance between the couch and cylinder is adjusted to give a single-ply sheet of the desired thickness, and the couch is driven at a lower speed than the cylinder in order to allow the sheet to build up to the proper thickness. When the sheet is formed on the cylinder the fibers have a tendency to assume a position parallel to the direction of travel of the cylinder; and by blowing the sheet on to the couch roll the fibers are distributed and redeposited without uniformity. This results in a sheet having a more nearly uniform strength in all directions, and exhibiting no tendency to separate into laminations nor to warp or buckle on drying.—A. P.-C.

Method of Manufacturing Composition Wall Board. J. A. Buttress and G. A. Buttress, assignors to R. Goodcell. U. S. pat. 1,507,332, Sept. 2, 1924. A quick-setting plastic composition formed of plaster of Paris, sawdust, dextrine and water, is fed between two moving superimposed facing sheets which pass between a pair of rolls. The addition of dextrine in the plastic composition makes the mixture set so rapidly that after the sheet has travelled about 75 ft. at the rate of 25 ft. per min. it has swelled to its fullest extent. It is then passed through another pair of rolls which insures against formation of air pockets and at the same time presses the plastic body against the facing sheets. It is then carried forward another 75 ft., during which time it begins to dry, and is then cut into suitable lengths. These are then successively trimmed along the edges, brushed to remove adhering particles of paper and plastic, stacked vertically on trucks, and dried in a kiln for 18 to 24 hr. at a temperature of about 130°F. The facing sheets need not be waterproof.—A. P.-C.

Apparatus for the Manufacture of Pulp Boards. J. Cormie assignor to Agasote Millboard Company, U. S. pat. 1,506,515, Aug. 26, 1924. When boards are made by pouring the pulp into a mold and then subjecting it in the mold to the action of pressure and suction, if boards smaller than the mold are required, this is usually obtained by trimming down the finished board to the desired size. According to this invention removable strips are inserted in the mold so that the board is weakened along lines corresponding to the reduced size required. The board can then be broken to the right size while still in a condition to permit of the trimmed portions to be returned to the pulp supply and re-used. The height of the strips must always be somewhat less than the ultimate thickness of the board after pressing, so as to prevent damage to the wire screen of the mold, to the press and to the strips.—A. P.-C.

Method of and Apparatus for Sharply Bending Fiber Boards. A. Elmendorf. U. S. pat. 1,512,916, Oct. 28, 1924. In order to prevent cracking of pulp board when it is bent into shape in the manufacture of boxes or other containers, the board is gripped between two clamps composed of opposed jaw members extending throughout the width of the board, and having adjacent edges parallel and on opposite sides of the line of the fold. To prevent the breaking or cracking of the outside of the board, the two clamping jaws on the outside of the board are connected by means of a strip of spring steel which presses and compacts the board during the bending. In order to prevent the material on the inner side of the bend from splitting and forming an inward bulge the work is bent over the long edge of a board which fits between the edges of the clamps on the side of the board.—A. P.-C.

Straw Board and Straw Paper. H. G. Funsett. Paper Trade J. 80, No. 23, 58-60 (June 4, 1925); Paper Mill 49, No. 23, 30-34 (June 6, 1925); Paper Ind. 7, 419-423 (June 1925). A description of its process of manufacture.—A. P.-C.

Paper Board Manufacture. Anon. Wochbl. Papierfabr. 56, 639-643 (May 23, 1925). The loss and recovery of paper board stock is discussed. The Schmidt and Schuricht recovery systems (Ger. pats. 191,325 and 277,599) are described. The following conclusions are drawn on the basis of several tests: stock losses are less with board the composition of which is high in freshly added fibers; the more viscous the stock is beaten the less is the loss; strongly sized stock yields less losses; and there is less loss in the manufacture of thin paper board.—A. P.-C.

(To be continued)

GOVERNMENT PAPER AWARDS

(Continued from page 42)

Lot No. 312.— 5,000 lbs. Ditto, 140 and 181 lbs., wrapped as above. Minimum order, one weight, 2,500 lbs. Virginia Paper Company, Inc., 8.635 cents.

Lot No. 313.— 6,000 lbs. Ditto, Colored, Flat, as above, 91 and 115 lbs.; wrapped as above. Minimum order, one color, 2,000 lbs. Virginia Paper Company, Inc., 10.23 cents.

Lot No. 314.— 6,000 lbs. Ditto, Flat as above, 140 and 181 pounds, in wrapped bundles as above. Minimum order, one color, one weight, 2,000 lbs. Virginia Paper Company, Inc., 10.23 cents.

Lot No. 315.— 5,000 lbs. White Index Bristol, Board, Flat, 22½x28½—91 and 115 lbs., with projecting colored paper marker between each 100 sheets. Minimum order, 1 weight, 1,500 lbs. Carew Manufacturing Company, South Hadley Falls, Mass., 26 cents.

Lot No. 316.— 5,000 lbs. Ditto, 140 and 181 lbs., packed as above. Minimum order, one weight, 1,500 lbs. Carew Manufacturing Company, 26.0 cents.

Lot No. 317.— 5,000 lbs. colored Ditto, Flat as above, 91 and 115 lbs., packed as above. Minimum order, one color, one weight, 2,000 lbs. Carew Manufacturing Company, 30.00 cents.

Lot No. 318.— 7,000 lbs. Colored Ditto, Flat, 140 and 181 lbs., packed as above. Minimum order, one color, one weight, 2,000 lbs. Carew Manufacturing Company, 30.00 cents.

White Paraffin Paper

Lot No. 351.— 5,000 lbs. White Paraffin Paper, Flat, 24x38 inches; 16 lbs. Minimum order, 1,000 lbs. Lindemeyr & Harker, 12.75 cents.

Gummed Paper, White and Colored

Lot No. 352.— 4,000 lbs. White Gummed Paper. Flat, 17x22 inches, 23 lbs. and 20x25 inches, 30 lbs. Minimum order, one size, one weight, 1,000 lbs. R. P. Andrews Paper Co., 15.30 cents.

Lot No. 353.— 500 lbs. Colored Ditto, Blue and Pink, as above. Minimum order one size, one weight, 250 lbs. The Barton, Duer & Koch Paper Company, 22.50 cents.

Blotting White and Colored

Lot No. 354.— 25,000 lbs. White Blotting Paper, Flat 19x24 inches, 80 lbs. in wrapped bundles with projecting colored paper marker between each 100 sheets. Minimum order 4,000 lbs. R. P. Andrews Paper Company, 7.20 cents.

Lot No. 355.— 20,000 lbs. Colored Ditto, as above. R. P. Andrews Paper Company, 7.20 cents.

25 Per Cent Rag Blotting, White and Colored

Lot No. 356.— 30,000 lbs. 25 per cent Rag White Blotting Paper, Flat, 19x24 inches, 80 lbs., wrapped as above. Minimum order, 4,000 pounds. R. P. Andrews Paper Company, 8.24 cents.

Lot No. 357.— 50,000 lbs. ditto, Colored, wrapping, packing and minimum order as above. R. P. Andrews Paper Company, 8.24 cents.

Desk Blotting, Colored

Lot No. 358.— 20,000 lbs. Desk Blotting Paper, buff and blue. Flat, 19x24 inches, 100-lb., wrapped as above. Minimum order, one color, 5,000 lbs. R. P. Andrews Paper Company, 7.46 cents.

Lot No. 359.— 60,000 lbs. Moss Green Ditto. Minimum order, 10,000 lbs. The Whitaker Paper Company, 8.17 cents.

White and Red Stereotype Molding

Lot No. 360.— 2,000 lbs. White Stereotype Molding Paper for paper process. Flat, 19x24 inches, 50-lbs., wrapped as above. Minimum order 1,000 lbs. The R. A. Cauthorne Paper Company, 11.04 cents.

Lot No. 361.— 2,000 lbs. Red Ditto. R. P. Andrews Paper Company, 19 cents.

Offset for Web Presses

Lot No. 362.— 25,000 lbs. Off-set Paper for Web Presses, 24x36, 30. Rolls 39 inches wide, 3-inch cores. Minimum Order, 5,000 lbs. The Whitaker Paper Company, 6.81 cents.

Oiled Manila Tympan

Lot No. 363.— 20,000 lbs. Oiled Manila Tympan Paper, 24x36 inches, approximately 86 lbs. Rolls 38, 48, and 55 inches wide; maximum weight 150 lbs. Wound on wooden plugs 1½ inch hole. Minimum order, 5,000 lbs. The Barton, Duer & Koch Paper Company, 8.45 cents.

Plate Wiping for Embossing Presses

Lot No. 364.— 2,000 lbs. Plate Wiping Paper for Embossing Presses; 24x36 inches, 50 lbs. Rolls 24 inches wide, wound on wooden plugs, 1½ inch hole. Minimum order, 1,000 lbs. R. P. Andrews Paper Company, 7.90 cents.

Back Lining for Case-Making Machines

Lot No. 365.— 6,000 lbs. Back-lining paper for case-making machines; 24x36 inches, 90 lbs. Rolls 9¼, 11⅛ and 24 inches wide, wound on wooden plugs, 1½ inch hole. Minimum order, 2,000 lbs. Mathers-Lamm Paper Company, 5.40 cents.

Press Board Colored

Lot No. 366.— 10,000 sheets Red Press Board. Flat, 24x32 inches thickness .0140 inch. Minimum order, 2,000 sheets. Mathers-Lamm Paper Company, 14.73 cents per lb. ($8.54 per 100 sheets).

Lot No. 367.— 15,000 sheets Gray Pressboard. Flat, 30x36 inches, thickness .0300 inch. Minimum order, 5,000 sheets. The Old Dominion Paper Company, $19.999 per 100 sheets.

Binders Board

Lot No. 401.— 500 lbs. News Board, 26x38 inches. Nos. 100 and 120. To be trimmed square on four sides. Minimum order, 500 lbs. R. P. Andrews Paper Company, 2.65 cents.

Lot No. 402.— 100,000 lbs. Chip Board, 26x38, No. 50, thickness, .040 inch cut 21½x32½, 24½x30½, 24½x32, 24½x38, 26x42½, and 28½x34½. The R. A. Cauthorne Paper Company, 2.124 cents.

Lot No. 403.— 300,000 lbs. Ditto, cut as above, No. 100, thickness .020 inch. The Barton, Duer & Koch Paper Company, 2.29 cents.

Lot No. 404.— 40,000 lbs. Strawboard. Bids Rejected.

Lot No. 405.— 12,000 lbs. Lined Strawboard. Bids Rejected.

Lot No. 406.— 100,000 lbs. Box Board. Lined one side, rolled flat, non-warping, 35 sheets to the bundle of 50 lbs. The Barton, Duer & Koch Paper Company, 2.72 cents.

Lot No. 407, 408, 409, and 410. —Bids Rejected.

Chas. Cockraft Goes With Cascade Paper Co.

West Tacoma, Wash., January 8, 1926.—Charles Cockraft, who for about two years has been connected with the Northwest Paper Company, as night superintendent in the company's new process soda pulp mill, has become connected with the Cascade Power Company as one of the tour foremen in the company's new soda mill.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

The Preparation and Administration of Budgets

By Chester E. Weger, Henry L. Doherty & Co., New York, N. Y.

Many articles have appeared recently written by budget experts in one field or another, explaining what a budget is, how a particular budget system has been successfully applied, or what in general a budget system is supposed to accomplish. In these days teachers, accountants, treasurers and business experts all point out the aim of budget procedure as an aid in the management of business concerns.

In view of so much favorable testimony which has been accumulated concerning the budget, it is surprising to observe how little enthusiasm is generally accorded to this subject in management and executive circles. In some organizations you will find that their budget system is tolerated as a necessary evil to the treasurer's activities. It is the means of keeping this officer in touch with the future cash requirements of his company and virtually exists for the treasurer's benefit alone.

In other organizations their budget system is confined almost entirely to that phase of operations having to do with the creation of permanent investments or the making of improvements in existing plant facilities. In these particular concerns the treasurer does not even bother about the budget and his periodic advance surveys of cash receipts and disbursements are often made without any reference to the routine budget procedure. I take it that the chief concern of the treasurer in these cases would be to avoid writer's cramp from signing dividend checks in making distributions of cash to holders of the common stock.

Refers Only to Sales and Expenses

In still other organizations the budget refers only to sales and expenses. For example, it is only a few weeks ago that I received a great surprise when the chief budgeteer of an organization which has been loudest in broadcasting the virtues of its budget system, came down to New York to inquire if we could offer him any friendly suggestions for putting concretely before his executives a statement of cash results predicted by the budget. When all was said, I found that his organization had been concerned thus far almost entirely with the development and application of sales and production estimates. Little time and thought had been given to budgeting the other phases of their business. However, now that the sales and production budget problems had been partially answered, they were turning their time and attention to applying budget procedure completely to all the activities of their business.

These observations have convinced me that budget development up to this time has been very largely a matter of expediency—the result of efforts of individual departments to cope with an immediate and particularly pressing situation. This, to my mind, is the reason why the executive staffs of many organizations do not accord more general enthusiasm and support to the budget idea. They have usually delegated to a subordinate department head the task of finding the solution to a difficult situation and when the solution has been found, perhaps through the application of some phase of budget procedure, the executives too frequently have not recognized the instrument which, with their support and guidance, might have become the surest means of protecting and co-ordinating all phases of the business, of stabilizing the present earning power of their company and utilizing to the best advantage its available resources for the creation of additional earnings.

How much simpler would be the problem if budget procedure could in all cases be installed under the broad gauge view of a chief executive who was fully cognizant of his responsibilities in relation to the budget and whose watchful eye and sympathetic ear were ever open to a careful follow-up and analysis of budgeted results.

It is very probable that the first and most important problem confronting those of you who may be directing some phase of budget work is to arouse the attention and interest of your executive staff to a point where it appreciates that a successful application of budget procedure cannot be made without its wholehearted recognition and support.

In speaking of a budget procedure I do not refer merely to a financial estimate or a sales estimate or a construction estimate, but to a recognized plan of operation which expresses the purpose of all the activities of the business over a future period; a co-ordinated plan of business conduct which outlines future operation from certain known fundamental conditions; a certified plan and schedule of operations which is not intended to be altered except by and with the concurrence of those who acquiesced in the plan. Certainly the responsibility for such a budget can rest only with the chief executive.

Address of Frank W. Shibley

In this connection, may I read to you a summary from an address made by Frank W. Shibley at a dinner of the Illinois Manufacturers' Costs Association in Chicago, on April 28, 1925? As many of you may know, Mr. Shibley is a vice-president of the Bankers Trust Company of New York. He has had much experience since 1920 in making readjustments and reorganizations of business concerns in connection with the commercial business of the Bankers Trust Company and his experiences in these difficult situations, I think, make it well worth while to recall what he has to say. His address is summarized as follows:

"Scientific Industrial Management contemplates and embraces:

1—An executive with power, who has a comprehensive knowledge of the industry in which his business is placed, who knows how to make and administer an annual budget, who appreciates the true relationship between earnings on invested capital and earnings on sales, who is at all times a forward looking man, one constantly feeling his way into the future, not necessarily a genius or one gifted with extraordinary ability, but a man of sound judgment and good common sense.

2—A business balanced in every essential department.

3—A budgetary system of control administered by the chief operating executive; the man above referred to.

4—A sales policy, the aim of which shall be to get the product of the company under its original name to the consumer by the most direct and cheapest means.

Scientific industrial management simply presupposes thought applied to business and action based on accurate forecasting."

You will not fail to perceive the importance which Mr. Shibley attaches to the budget as a means of assisting in the solution of the perplexing problems of management, and may I invite your attention to the emphasis, which he places upon what he considers, to be the proper relation of the budget to management. Unmistakably he considers the administration of the budget one of the most important functions of the management.

To my mind this is a most essential consideration in the administration of the budget in any business. The attitude of the chief executive toward the budget and the degree to which he assumes the responsibility for its preparation and administration, very largely predetermines the value which will be returned from the budget. If the executive is lax in his attention to or not wholly in sympathy with the budget, you may rest assured that any system which you may devise will degenerate sooner or later into the parlor game of guessing what next year's figures will be.

"Guesstimating"

"Guesstimating," a term which all of you may have heard applied to this method of arriving at future results, has some advantages but relatively it accomplishes very little. Under this system you would have the satisfaction of being able to say, "Yes, we 'guesstimate' in advance. We can tell you very closely what our future earning may be, if conditions do not change; or what our future cash position will be, if Lady Luck does not desert us." Usually such "guesstimating" only occasions a mild interest on the part of the chief executive when the anticipated results are made known to him, and, if he makes any comment, it will be very likely to say, "Interesting, if true." With this remark he may sign his name to the document and, in the press of other matters, pass along the so-called budget without any serious consideration, to the treasurer to use, if that official dares to do so. It may be predicted here that this individual, being usually of pessimistic turn of mind, probably will not dare and accordingly will proceed to revise the sales figure downward and the expense figures upward until the net result looks more reasonable, "the way he figures it."

This brings us to the point of considering what a budget really should represent. It would be very unusual if we did not have here tonight very diametrically opposite views on this question. There are doubtless those who feel that a budget is very largely an accounting matter. They believe that the accounting staff, being closer to the books and in intimate and daily contact with the past results, is in the best position to predict future results. To these individuals budgeting is simply accounting in advance, to apprise us of where we may land if conditions continue about as they have been. Such a budget is characterized by unitemized expenditures based on past history. It usually is not concerned with unit quantities and prices and of course it is lacking in sympathy and support from the operating organization and is in no way binding upon it. The final answer may be close to actual if fundamental conditions do not change. Perhaps it might even be closer to the actual results than a more scientific compilation. Since this "guesstimate" method of compiling a budget involves a minimum of time, effort and money to get an answer, then it may be asked, "What is the value of a more costly and elaborate procedure?" In a very few words the answer is that "Guesstimating" does not supply the executive with a means of control.

Perfection of Control

An effective budget system, on the other hand, concerns itself almost exclusively with the perfection of control. In budgeting it is not necessarily the answer that is important. What counts more are the procedure and the methods used in arriving at the answer. An effective budget procedure must invite and assist the individual to think clearly and reason correctly about his future problems. Careful thinking implies control and when such thinking is based on material facts, almost insures control. The parceling out of individual responsibilities together with the knowledge that these responsibilities are accepted, this means co-operation of the personnel. Departmental functions in balance and in phase, this means co-ordination. And there you have it, gentlemen, what a budget system means to me—co-operation, co-ordination and control. These three words stand out in the field of budget administration, real landmarks which you may refer to always for guidance in this work.

Who is interested in a mere accumulation of figures intended to predict the future financial position? What security does such an accumulation offer the organization? Beyond the scant value it might be to the treasurer, it is obviously not significant and indeed is to be considered only "interesting if true."

However, if all the plans underlying the budget have been formulated and scheduled by those individuals who expect to carry out the plans of their own making; if there has been a mutual concurrence in plans up and down the line; if it is understood that the budget is to prevail in every circumstance unless contrary to the logic of business judgment, then when the word is given to go ahead, each individual in the entire organization knows exactly what mark he is aiming for. Having set that mark for himself or having agreed that it is a reasonable attainment, each individual is in a proper frame of mind to do his level best to accomplish what has been cut out for him and he is spurred on by the knowledge that he alone is accountable for the progress made. Imagine the supreme confidence and security an executive must feel when the initiative and driving power of each individual worker in his organization is focused on the attainment of that single objective—to meet the budget.

Must Have Flexibility

Suppose now, that changing economic conditions are suddenly imposed upon our organization. Some fundamental consideration, either favorable or unfavorable, and beyond control, may easily make it impossible or not feasible to attempt to carry out the original plans. For this contingency the budget system must have sufficient flexibility to permit the organization quickly to formulate new plans to cope with the new conditions. Re-arrangements must be made at once to restore the balance which some outside condition has disturbed; a new goal must be set up and the concurring voice of the management obtained again before going ahead. It is this phase of budget application dealing with proper concurrence in budget revisions that many times seems to be most weak. Too much stress cannot be laid upon the necessity of securing the same advanced concurrence of the management when fundamental changes in policy are contemplated as when the original plans were first placed in effect.

In our own organization we do not place undue stress upon the attainment of the original budget. It is all a matter of whether the individual has had within his control the factors which have influenced his budgeted result. However, we do attach great importance to the ability of the operator to pass on to the executive promptly the effect on the budget of any change in conditions whether for better or worse. The earlier such changes are made known and the farther into the future their effect is projected, the easier it is for the organization to cope with a new situation

and take full advantage of the new opportunities which have been created. Obviously, if the operators feel the responsibility of keeping the executive staff advised of changes in conditions, there will result a co-ordination of effort which is quite indispensable to the safe conduct of the business.

When the chief executive comes to be the chief supporter of the budget and after the purpose of the budget comes to be recognized by all primarily as a means of control, it is quite possible that you still may not be satisfied with the results from your budget system. I would like to offer one or two suggestions calculated to confirm what you may already know to be the reasons for the leaks which seem to impair the efficiency of your budget procedure.

Lack of Personnel Organization

It has been my observation that a fair share of the difficulties in budget administration may be traced back to the lack of a definite personnel organization. Very frequently you will find that budget procedure does not function accurately, promptly and effectively on account of indefinite or overlapping responsibilities or on account of some failures to accept responsibility. For my part I am a great believer in organization diagrams which, when accompanied by some definitions of responsibility, tend to eliminate misunderstandings and make it simple and easy to tag the individual with the budget promise which he is expected to perform. One great advantage of real budget procedure is that it forces consideration of responsibilities by emphasizing any lack of co-operation and co-ordination.

It is of vital importance in this connection that the job of collecting, analyzing and co-ordinating the budget information such as might ordinarily be carried on under the title of "Budget Director," be understood correctly by the whole organization. Regardless of where budget data are collected, analyzed and co-ordinated, whether in the comptroller's, the treasurer's or the secretary's office, it must be recognized that this job cannot be the responsibility of any one of those officers under those titles. To be sure, the management being responsible for this budget, may, for convenience, assign one of those officers the duty of supervising the compilation of the budget, but in no event, I believe, should such an assignment be confused with the duties of the comptroller, secretary, or treasurer. The person who accepts the assignment of getting the budget together is necessarily acting for the management and, for the sake of clearness, the organization diagram should show the responsibility for assembling the budget directly under the management, but through the medium of a budget director, say, or perhaps the title "Staff Assistant to the Management" better implies the significance which should be attached to this position. If the treasurer, for example, is made responsible for the budget, then this individual's name might well appear twice on the organization chart, once on the management's staff as budget director and once as treasurer of the company.

It is very discouraging for a budget man to have worked diligently in the face of precedent to overcome prejudices and inertia in order to place in the hands of the chief executive his one best means of making the uncertain more certain, of making the equal more equal, only to find himself the target for all the adverse criticism which is sure to fall to his lot if the chief executive does not fully appreciate his own responsibility, and, by default, permits the budget man to become the "goat."

Alignment of Accounting Procedure

Another place where things are often found askew in budget administration is in the alignment of the accounting procedure to tie-in with operating responsibilities. If the budget is to be most effective, the classification of accounts should, it seems to me, be designed at least in essential points, to conform with the mental process of the management in thinking about the business. The parts into which the management resolves a business when studying and visualizing the results, are the best indications of the lines to be followed in setting up the accounts. Under present day business methods, where management tends more and more to delegate to particular individuals the authority and corresponding responsibility for certain activities, it becomes increasingly necessary that particular accounts reflect these certain activities. The executive in reviewing the actual results in relation to the budget can then not only weigh the results but can know who is responsible for the results, which is most desirable in gauging the degree of reliance which is to be placed on the individual with whom the responsibility rests. When accounts do not conform reasonably to organization lines, there is every opportunity to "pass the buck" and incentive is lost for keeping expenditures within budget limits.

From recent experience I am convinced that the first approach to installing a budget system should be by way of a thorough study of the accounting process by the management. Precedent in accounting matters seems to be accorded almost undue consideration and a very decided reluctance exists to consider changes in accounting procedure. There seems to be a tendency to regard accounting problems as being reserved for consideration in some sacred sphere which is beyond the pale of operators, engineers and executives who have not been baptized in the accounting faith. If the executive will make a study of the accounting procedure it will in many cases give him for the first time a real insight into the accounting methods in use and an understanding of them, with the very probable result that some changes will be suggested better to meet the ideas of the management in following responsibilities and lines of control.

Am I too optimistic in expressing the hope that all of you gentlemen here tonight feel as I do that accounting is but a service to management in recording for its information and guidance the actual results of yesterday while budgeting renders a similar service in attempting to predetermine the results for tomorrow? The tomorrows fade into the yesterdays and the comparison of the estimates with the actual should be accomplished simply and clearly as often as may be necessary to keep the executive continually posted on his position in relation to the desired course as laid down by the budget and to keep him advised of the reason for any deviation from that course. This cannot be accomplished without a complete mutual understanding on the part of the accountant and the budget man as to accounting procedure and a realization by both that their function in common is to serve the management.

Fundamentally Important

It seems to me, that the points which I have just discussed are so fundamental and important and must be so universally considered in budget administration, that I have felt warranted in dwelling at some length to present them definitely for your first consideration. With your permission, I will now discuss more specifically some of the budget methods, and procedure as applied by Henry L. Doherty & Company in the conduct of the various kinds of business carried on under our management.

We have to confess along with many other organizations, that our budget procedure grew out of the necessity of conserving cash resources. The real beginning was made back in the trying times of 1913 and 1914 before the war. Accordingly, in the depression immediately following the war, our budget procedure had come to be recognized throughout our organization as an absolute guide in conducting our affairs. Our 12 years of intensive effort in budget development have brought us now to the point where we feel we may look with some pride on our accomplishments to date, but very humbly can we see the much that remains for us to do in the future.

It might be well to mention the parts into which the budget process seems to us logically to be divided. These are first, the original estimate, made before the budget begins; second, the follow-up and comparisons of the original estimate with the actual; and third, the revisions of the original estimate. All our budget forms are designed to maintain fully these three different steps. The original budget covers a calendar year and is always referred to as a basis in making monthly comparisons. When revised estimates are made, the variations from the original budget are ex-

pressed in terms or anticipated differences and the identity of the original estimate is thus always maintained.

Ten Year Period Trends

We frequently have forecasts prepared on individual companies for a ten-year period to indicate trends and the extent of future possibilities. Such forecasts are usually brought up to date once each year. For the working budget, however, we have found the year most satisfactory for all companies because in 12 months' total, the seasonal distortion is eliminated and the results of successive budget periods are on a comparable basis.

Personally, I believe that our greatest good fortune in budget work originated with the idea to use the balance sheet as a basis for preparing budgets. In organizations such as ours, which is composed of possibly one hundred and fifty individual, widely separated, operating companies, engaged in carrying on many different kinds of business, it becomes a problem in itself to find a common language and procedure which can be easily understood alike in the field and in the central office and which can be applied without undue modifications to all companies without the need of an interpreter.

After all, whether it is a gas or electric utility company, a railway company, an oil producing company, a refining company, an appliance manufacturing company, a construction company or a marketing company, the respective balance sheets are similar in essential details. Business men who have the responsibility of the management of these companies and those who sit on boards of directors, all have some knowledge of what a balance sheet means.

In these days, also, there is more and more of the tendency to call in commercial and investment bankers for advice and assistance in financial matters. Always, the most successful way to approach these gentlemen is with an earnings record in one hand and an actual balance sheet in the other. If, in addition, you are in a position to show the banker an estimated earnings statement and an estimated balance sheet, which have been prepared from a budget in which you thoroughly rely, then your chances for favorable consideration at his hands are very materially increased. Confidence is the basis of most credit arrangements and a budget, particularly on a balance sheet basis, is very tangible and acceptable evidence that appeals to the banker as indicating sound and careful management.

It certainly seems to me that if it is proper to consider past results from the standpoint of earnings statements of balance sheets, it is of even more importance that we look into the future with the same kind of consideration. Again I say that I attribute no little part of any success we may have had in this work to the fact that early in the development of our system the balance sheet method of budgeting was adopted.

Balance Sheet Method of Budgeting

Perhaps it would be well to explain more fully what is meant by the balance sheet method of budgeting. In this method the items in the budget represent estimated changes in all the balance sheet accounts. Since we think of the net cash production as a governing factor in our budget, the estimated change in the cash account is the last item in the budget. The algebraic sum of the changes in all other balance sheet accounts when expressed in terms of their effect upon cash, will, of course, give the change in the cash account. Additions to cash representing credits to other accounts are shown as black figures while deductions from cash representing debits to other accounts are shown as red figures. If the estimated debits to an account exceed credits, then the net change in the balance as shown in the budget will be the equivalent of a deduction from cash and will be set down as a red figure. Likewise in making comparisons with the estimate we use red figures in the difference columns to denote expenditures in excess of the budget, while black figures show savings. I must confess that many accountants have very little sympathy with the use of the black and red color scheme for showing additions to cash and deductions from cash, respectively. However, this method has distinct advantages, the first being that red figures assist in picking out at a glance the items which need attention, and the second being that the number of columns required on a sheet is very materially reduced.

When considering the changes in the balance sheet, there are three principal activities that very largely influence the cash position of the business. These are: (1) the Operating Estimate, dealing with revenues and expenses, and producing net profits or losses reflected in the Surplus Account; (2) Capital Expenditures; and (3) Storing of Supplies and Materials. The whole tenor of the budget depends upon the results of these three activities because most of the changes in balance sheet accounts depend upon or are influenced by these results. Accordingly, each of these three activities is carefully controlled by subsidiary estimates, with monthly follow-up comparisons and monthly revisions.

Departmental Reviews and Expenses

The operating estimates divide the company total into departmental revenues and expenses, each in accordance with the accounting classification. The principle of having the individuals down the line prepare the estimate is carried out as far as is at all practical. The revenue predictions are based upon the unit quantities and rates for each different class of commodity sold. The production department is responsible for the estimate of expenses required to turn out the quantities called for by the sales estimate.

One great weakness which I think generally remains to be overcome in preparing operating estimates is the tendency to place too much reliance on comparisons with last year. So far as I can see, no particular credit attaches to repeating this year the mistakes we made last year. Why is last year's figure to be considered as a standard of comparison? How can one remember all the unusual, favorable, or adverse items that have entered into an account during the previous twelve months which ought to be eliminated before accepting last year's performance as a guide for next year's estimate? To use last year's actual figure as an excuse for the amount to be set down in next year's estimate is, I think, only a confession that the contributing factors to last year's result are not known.

It is a thrill that comes once in a lifetime when a man sizes up his problem, carefully concludes what results within reason he knows should be obtained and then sets himself to the task of making a budget to give those results. It takes initiative, courage and forethought to approach the operating budget problem, from this angle, but it is a most praiseworthy accomplishment. The man who has tried this system and failed to realize fully his ambition, has accomplished more good for himself and his organization, than the individual who has been satisfied to copy last year's results, little considering whether they were good, bad, or indifferent.

Follow Up Comparisons Made Monthly

The follow-up comparisons with the operating estimate are made monthly. One comparison shows actual results for the month compared with the estimate for the month. Another comparison shows the actual results for the budget period accumulated for all months to date, compared with the estimate for the period to date. Anticipated differences from the original estimate for the remainder of the year are also items to be set up each month so that it is possible to compare the original estimate for the twelve months with the revised probable actual for the twelve months. These comparisons and anticipated differences all originate in the local offices and are forwarded to the central office in New York as an integral part of the monthly operating and financial report over the signature of the general manager of the operating company.

Provision is made on each comparison for explaining the reasons for important differences from the estimate realized to date

and also for explaining the reasons for the differences anticipated for the remainder of the year. When received in New York the reports are analyzed and studied in the budget department and any important new factors which have appeared since the previous month's advice, are brought to the attention of the New York operating department, or some other executive department interested. Consolidations of all budget reports are made monthly by the statistical department for executive consideration.

Construction Estimate

The construction estimate is composed of items requiring expenditures for plant account or extraordinary maintenance, each item being supported by a construction requisition. Every construction requisition gives a detailed estimate of labor and material expenditures on a man-hour and unit cost basis: states definitely the location with supporting maps and charts when necessary; discusses in full the necessities and benefits to be derived from the expenditures; gives a detailed calculation of the earnings or savings to be made as a justification for the expenditure; carries a statement of the financial plan showing the cash outlay and shows a distribution of expenditures by accounts. Each requisition, of course, bears the approval signatures of the local officials.

Each month's follow-up comparison on the construction budget is made to show by individual requisitions the progress of expenditures to date in relation to the original estimate and to show anticipated differences from the estimate for the remainder of the budget period. A comparison is also made each month between the Now Estimated Ultimate Expenditure for each requisition and the Last Authorized Amount. Anticipated over-runs or under-runs are thus pointed out well in advance of actual expenditures. The follow-up comparisons are reviewed in the New York Budget Department and any important over-runs or under-runs which seem to be impending are brought to executive attention.

It is understood (emergencies excepted) that no commitments for construction expenditures will be made previous to concurrence of the New York Executive Committee. It is likewise understood that no commitments will be made involving over-runs on work already started without New York concurrence. It may be stated that these understandings are very generally accepted and lived up to throughout the organization.

Budget on Minimum Basis

As a matter of interest it might be remarked that we experimented last year and again this year with the idea of submitting the original construction budget on a minimum basis. That is to say, the original budget included only those construction expenditures that were considered necessary or unavoidable in the satisfactory operation of the local company. All that class of construction items which might be called urgent or desirable, were submitted in requisition form but not included in the budget. This procedure has been found to permit more time and attention to be given to the engineering and economic phases of a large and important portion of the construction program. It tends to limit at any one time the maximum authorization of outstanding commitments for construction and might conceivably avoid the later necessity of withdrawing authorizations in order to conserve cash lost through a decline in estimated earnings. Usually very little can be done by cutting expenses in a period of depression, to bolster up a serious loss in revenue. Conservation of cash in such cases usually must come by a contraction of the construction program. It is much safer and less costly, and also less disastrous to morale, to defer authorization previously granted and on which some expenditures already may have been made. Another advantage of the minimum construction budget is that it permits an intelligent selective process to be used on the urgent and desirable class of expenditures, making it possible to pick out those items which promise the best returns.

Before leaving the subject of construction budget, I would like to mention an important problem which now confronts us in this work; namely, how to check up on the estimated earnings or savings from individual construction expenditures. When you buy a turbine, certain efficiencies and economies are guaranteed by the manufacturer. You may spend $3,000 or perhaps $5,000 or more to run an acceptance test for the express purpose of finding out if these economies can be realized. Whoever thinks of spending money after the turbine is installed to verify whether or not the company is actually benefiting by increased earnings or savings to the extent estimated when the request was made for the money to install the turbine? Too little thought is now being given in the follow-up of construction expenditures to see that they actually yield the estimated earnings or savings which were used as a justification for the expenditure.

Stores and Supplies Estimate

The stores and supplies estimate is divided into three groups: Operating materials; construction materials; new business or appliance stocks. These stores programs are closely co-ordinated with the operating program, construction program and the new business program, respectively. Estimated balances are arrived at for each month and the estimated turnover is calculated. Follow-up comparisons are made each month between the estimated and actual balance for the end of the month and also between the estimated and probable actual balance for the end of the year. Likewise comparisons are made each month between the originally estimated turnover for the year and the revised probable turnover for the year. These monthly comparisons are also studied in the New York budget department and the responsible New York operators are advised of important discrepancies from the original estimate, so that they may take suitable steps to correct any untoward conditions.

When the operating, construction, and stores estimates have been prepared, it is then rather a simple matter to fit the cash effect of these into the balance sheet budget and supply a correlated estimate of the other balance sheet account changes. The accrual side of the estimate for reserves, taxes, interest and insurance accounts will agree with the corresponding amounts set up as deductions in the operating estimate. Charges to replacements reserve are taken from the accounting distribution on the construction requisitions. Tax payments, interest payments and insurance payments are known to the secretary or treasurer of the company and can be scheduled in the proper months as estimated debits to those accounts. Sinking funds and dividend payments are simply deductions from cash to be scheduled when payable. Accounts receivable have their debit side directly related to operating revenues. Credits from collections will need to be based on these revenues. Accounts payable estimate is determined largely by the policy to be pursued in asking creditors for terms and the policy in regard to bank loans. The completed balance sheet schedule when added up shows on the bottom line the estimated net cash production, total for the year and detailed by months. This complete picture is referred to as a cash budget. The picture is complete because the balance sheet necessarily embraces every activity in which the company is engaged. No loophole is left where dollars may go astray. They are all accounted for.

Estimated Balance Sheet

The estimated twelve months' total budget changes are set up in one column beside a second column showing last year's comparative results and also beside a third column which shows the balance in the accounts at the beginning of the year. It is rather an easy matter to compute an estimated balance sheet for our information or that of our banker friends, by adding the estimated changes in balance to the actual balances, at the beginning of the period.

Every month the follow-up comparisons are made against the cash estimate both for the month and for the period to date. An-

(*Continued on page 80*)

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending November 30, 1925, and for the Eleven Months Ending November 30, 1925 as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER

	November				Eleven Months Ending November 30			
	1924		1925		1924		1925	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper, except printed matter (total)	.....	9,968,064	.....	10,256,115	.....	107,863,768	.....	109,916,217
Printing paper—								
Standard newsprint ....lbs...free	226,141,890	8,134,517	249,722,541	8,923,272	2,463,984,495	92,080,155	2,652,680,113	94,950,909
Imported from—								
Finland	4,456,440	137,487	1,448,816	40,968	66,175,576	2,070,797	42,136,010	1,290,891
Germany	5,892,941	173,661	3,787,408	115,421	74,260,110	2,251,079	49,465,471	1,535,546
Netherlands	284,885	9,840	352,849	10,600	2,152,928	69,021	1,050,608	34,157
Norway	4,836,137	151,614	2,314,050	69,885	29,367,286	945,988	34,791,582	1,057,170
Sweden	12,727,059	386,617	10,141,252	305,211	111,264,416	3,500,074	119,779,654	3,604,950
Canada	197,780,295	7,270,724	221,428,958	8,039,247	2,176,779,205	83,124,014	2,376,610,704	86,444,127
Other countries	164,133	4,574	10,249,208	341,940	3,984,974	119,182	28,846,084	984,068
All other, n. e. s. ....lbs...dut.	1,842,099	81,594	1,371,818	77,801	25,009,150	1,048,225	15,902,997	772,719
Grease-proof and water-proof papers..lbs...dut.	92,602	12,384	217,420	25,450	1,259,427	144,925	2,001,298	254,100
Kraft wrapping paper....lbs...dut.	2,040,265	82,573	1,441,398	61,442	26,308,977	1,011,293	13,308,822	555,176
All other wrapping paper....lbs...dut.	1,121,591	52,462	692,211	39,253	20,668,460	809,526	5,337,716	257,370
Writing, drawing, bond, etc....lbs...dut.	274,844	66,842	290,566	71,384	2,428,482	559,947	2,886,889	676,018
Surface coated ....lbs...dut.	159,515	38,787	141,744	47,478	1,776,774	416,764	1,422,387	484,694
Tissue paper ....lbs...dut.	182,727	80,056	201,732	102,445	2,222,194	905,745	2,509,881	1,072,399
Paper boards—								
Pulp boards in rolls....lbs...dut.	5,582,318	145,353	6,705,173	156,405	72,493,918	1,994,718	67,733,349	1,753,194
Other paper boards, n. e. s....lbs...dut.	2,819,561	67,390	2,013,362	55,028	28,881,894	674,422	27,428,353	672,208
Cigarette paper, cigarette books and covers ....lbs...dut.	1,902,894	650,731	571,714	127,915	10,152,944	2,808,440	9,605,762	2,656,664
Photographic paper ....lbs...dut.	161,808	33,310	356,865	82,632	3,076,722	621,617	3,199,285	724,897
Hanging paper ....lbs...dut.	1,464,053	61,135	445,035	74,515	13,172,742	570,222	4,968,553	496,979
Paper boxes ....lbs...dut.	238,354	170,500	188,176	168,251	1,639,284	1,059,650	2,148,517	1,267,460
Duplex decalcomania, not printed ....lbs...free	52,404	12,522	35,059	8,918	463,273	110,164	380,767	97,769
All other ....dut.	.....	277,908	.....	293,926	.....	3,047,955	.....	3,223,661
Books and other printed matter (total)	.....	1,073,513	.....	1,324,499	.....	9,008,557	.....	12,458,504
Books and pamphlets in foreign languages ....lbs...free	202,561	118,507	210,473	236,181	2,184,987	1,310,001	1,880,076	1,658,786
Books, maps, music, etc., 20 years old lbs...free	32,906	262,766	37,196	231,518	339,422	1,610,381	381,975	3,324,609
Other books, etc. ....lbs...free	193,945	224,494	231,302	299,813	2,204,908	1,609,815	2,474,937	2,314,271
Books, pamphlets, and music, n. e. s..lbs...dut.	307,260	227,533	352,741	280,607	3,084,103	2,170,213	3,460,985	2,573,719
Maps, charts, and other printed matter n. e. s. ....dut.	.....	80,245	.....	69,031	.....	773,831	.....	820,734
Lithographically printed matter, n. e. s.—								
Cigar bands, labels, and flaps....lbs...dut.	5,037	7,912	13,885	14,292	99,570	129,462	153,554	138,216
Decalcomanias ....lbs...dut.	19,209	30,644	33,031	51,480	235,137	336,529	272,001	416,308
All other ....dut.	.....	121,412	.....	141,577	.....	1,068,325	.....	1,211,861

WOOD PULP

Mechanically ground wood pulp....ton..free	22,174	670,172	31,344	803,749	193,475	6,432,033	266,618	7,679,782
Chemical wood pulp—								
Sulphite, unbleached....ton..free	43,851	2,385,553	45,404	2,525,251	496,464	26,601,292	529,826	28,603,191
Sulphite, bleached ....ton..free	25,640	1,949,886	21,352	1,727,584	247,991	19,115,055	266,094	20,838,800
Total sulphite ....ton	69,491	4,335,439	66,756	4,252,835	744,455	45,716,347	795,920	49,441,991
Imported from—								
Finland	2,227	119,679	3,797	207,013	51,314	2,663,101	54,978	2,572,638
Germany	9,225	530,778	6,379	421,189	63,426	3,742,670	54,408	3,432,632
Norway	6,313	409,562	5,658	426,031	53,454	3,771,833	64,365	4,843,010
Sweden	19,913	1,176,170	14,206	881,584	259,380	14,732,059	244,488	14,390,721
Canada	29,828	1,975,961	34,283	2,158,241	293,770	19,445,871	352,178	22,723,059
Other countries	1,985	123,289	2,433	158,777	23,111	1,360,813	25,503	1,479,931
Sulphate pulp, unbleached (Kraft pulp ....ton..free	19,436	1,124,135	27,741	1,689,430	252,084	14,447,825	280,640	16,665,037
Imported from—								
Finland	586	28,609	3,549	200,003	11,440	547,773	15,482	828,573
Norway	1,285	65,911	2,767	168,954	12,287	617,341	9,227	550,875
Sweden	8,249	433,571	10,356	592,601	110,075	5,806,151	134,508	7,510,531
Canada	8,717	565,052	9,869	628,407	114,942	7,306,866	117,288	7,505,920
Other countries	599	30,992	1,200	99,465	3,340	169,694	4,135	269,138
Sulphate pulp, bleached....ton..free	8,436	462,071	4,009	173,770	25,294	1,410,755	15,301	869,384
Other pulp ....ton..free	211	6,147	.....	.....	1,962	113,485	2,013	143,805

CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

Colors, dyes, stains, color acids, and color bases, n. e. s. ....lbs...dut.	362,595	527,277	83,044	87,822	3,017,690	3,885,352	4,954,255	6,341,431
Imported from—								
France	4,495	6,154	.....	.....	116,181	166,475	111,374	155,286
Germany	156,455	229,626	74,952	80,020	1,432,576	1,774,795	2,569,686	3,364,421
Italy	12,536	21,528	1,610	2,146	143,913	205,022	190,923	233,124
Switzerland	142,708	226,661	.....	.....	1,001,697	1,357,706	1,559,669	1,908,887
United Kingdom	11,305	13,633	4,832	3,290	80,585	78,958	162,256	135,588
Other countries	35,096	29,675	1,650	2,366	242,738	302,396	360,347	544,125
Kaolin, china, and paper clay....ton..dut.	23,724	222,488	28,256	290,074	289,181	2,946,065	305,725	2,927,117

(*Continued on page 76*)

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Fig. 510 illustrates Taber SL Double Suction Centrifugal Pump.
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PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 74*)

PAPER AND MANUFACTURES OF	November 1924 Quantity	November 1924 Value	November 1925 Quantity	November 1925 Value	Eleven Months Ending November 30 1924 Quantity	Eleven Months Ending November 30 1924 Value	Eleven Months Ending November 30 1925 Quantity	Eleven Months Ending November 30 1925 Value
CRUDE PAPER STOCK								
Rags for paper stock .....lbs...free	44,769,071	1,257,331	41,261,515	1,051,020	457,365,498	10,445,956	539,257,866	14,944,584
Waste bagging, waste paper, etc.....lbs...free	9,481,125	132,436	15,161,130	287,545	99,507,413	1,175,192	119,824,714	2,105,699
Old rope and all other paper stock...lbs...free	6,772,807	395,921	7,402,870	262,342	89,390,740	4,761,018	62,437,989	3,249,216
EXPORTS—PAPER								
Paper, except printed matter (total)	.....	1,931,881	.....	2,093,983	.....	22,040,641	.....	22,005,370
Printing paper—								
Newsprint paper .....lbs.	2,907,599	164,831	5,893,704	274,877	31,617,594	1,637,028	41,590,877	1,847,782
Exported to—								
Canada	101,726	7,421	34,689	2,353	1,002,675	77,259	1,060,257	72,815
Central America	29,433	1,685	136,171	7,117	644,551	35,974	1,118,273	56,853
Mexico	180,600	7,587	177,548	10,848	2,240,549	116,826	1,743,104	87,732
Cuba	862,127	35,917	1,608,496	65,480	17,084,129	770,435	16,815,042	687,127
South America	318,812	22,782	191,148	11,703	2,351,939	136,836	7,053,588	324,571
China	968,870	69,797	1,528,759	80,015	2,915,694	211,936	4,927,871	217,936
Philippine Islands	355,392	15,239	787,222	33,886	3,722,244	178,729	5,147,677	230,161
Other countries	90,639	4,403	1,429,671	63,475	1,655,813	109,033	3,725,065	170,592
Book paper, not coated.....lbs.	2,111,322	216,137	1,179,400	131,366	17,021,194	1,921,168	15,690,849	1,765,512
Exported to—								
United Kingdom	21,911	4,364	12,011	2,151	711,831	139,685	132,411	22,521
Canada	107,744	13,645	188,929	24,251	1,569,098	202,713	2,015,426	248,719
Central America	43,733	4,581	38,197	3,588	576,806	63,350	626,193	66,450
Mexico	515,191	49,436	71,873	6,883	1,950,373	212,414	1,570,679	186,903
Cuba	465,221	48,371	238,557	25,035	3,454,911	385,055	4,366,305	433,421
Argentina	6,460	560	112,986	15,163	652,352	61,701	722,488	76,912
Brazil	32,522	4,074	3,450	456	356,199	46,590	275,473	39,638
Venezuela	17,501	2,307	56,037	5,597	466,156	52,220	644,327	58,836
Other South America	93,653	12,319	92,764	10,479	1,006,570	121,650	1,158,884	114,071
China	498,317	44,304	23,552	5,568	3,169,288	289,961	765,130	153,504
Philippine Islands	198,644	20,693	108,220	9,219	1,190,468	111,432	1,391,740	129,028
Australia	60,701	5,835	87,512	9,616	514,268	57,873	482,408	54,114
Other countries	49,724	5,648	145,312	13,360	1,402,874	176,524	1,539,385	181,393
Cover paper .....lbs.	101,578	20,088	79,802	15,947	756,791	143,894	1,079,385	207,209
Greaseproof paper and waterproof paper....lbs.	112,594	12,805	277,737	39,506	1,481,735	173,493	1,992,079	262,815
Wrapping paper—								
Kraft paper .....lbs.	42,659	3,999	158,769	9,096	583,361	68,192	722,463	59,345
Other wrapping .....lbs.	1,780,523	126,584	2,122,030	152,361	22,330,976	1,799,041	24,971,157	1,889,586
Surface-coated paper .....lbs.	236,117	36,505	416,779	58,195	3,225,571	477,353	3,481,565	510,363
Tissue and crepe paper .....lbs.	283,643	74,102	372,159	87,320	2,691,915	717,466	3,291,697	855,962
Toilet paper .....lbs.	324,854	36,225	402,282	46,907	3,967,668	461,110	4,586,806	553,466
Paper towels and napkins.....lbs.	81,822	15,219	126,674	20,197	1,312,607	210,202	1,450,673	220,134
Box board .....lbs.	.....	.....	2,495,571	93,867	.....	.....	18,428,603	674,337
Bristols and bristol board .....lbs.	106,025	7,029	156,528	15,141	834,925	99,914	945,598	111,171
Other paper board and strawboard.....lbs.	4,126,757	164,164	2,528,328	125,513	67,417,568	2,638,068	28,993,877	1,415,508
Sheathing and building paper .....lbs.	934,243	49,597	1,369,854	73,087	6,084,768	293,031	11,550,625	534,880
Wall board of paper or pulp.....sq. ft.	847,651	27,458	1,217,257	39,392	15,041,784	503,522	12,836,360	428,939
Blotting paper .....lbs.	213,975	25,130	168,339	22,021	2,261,017	273,560	2,598,376	316,439
Filing folders, index cards, and other office forms .....lbs.	31,450	10,517	39,213	14,641	402,476	142,769	588,434	195,485
Papeteries (fancy writing paper) .....lbs.	29,211	10,062	36,884	13,057	383,535	139,610	477,374	169,046
Other writing paper .....lbs.	255,440	44,198	475,763	75,867	4,162,303	662,808	3,439,926	618,818
Cigarette paper and books.....lbs.	17,738	5,606	30,418	9,649	814,454	290,931	455,971	136,015
Photographic paper .....lbs.	93,759	75,166	153,283	112,635	1,494,816	1,488,486	1,637,557	1,348,187
Paper hangings (wall paper).....yds.	1,589,943	42,925	1,037,020	27,644	21,237,148	559,801	21,047,599	542,538
Paper bags .....lbs.	648,178	57,116	850,631	77,310	9,325,134	867,471	11,765,482	1,031,572
Boxes and cartons .....lbs.	1,484,021	152,123	1,789,497	112,715	12,843,666	1,106,699	15,746,661	1,194,801
Carbon paper .....lbs.	63,246	49,070	94,811	67,136	830,475	657,142	964,120	766,758
Envelopes .....lbs.	217,225	35,523	184,039	35,478	2,228,747	441,414	2,247,361	427,991
Cash-register and adding-machine paper....lbs.	79,397	8,847	129,517	11,574	1,141,386	125,925	1,506,755	156,287
Other paper and paper products.....lbs.	4,660,713	460,835	1,834,013	331,484	40,474,535	4,140,543	19,310,133	3,764,479
Books, maps, pictures, and other printed matter (total)	.....	1,656,359	.....	1,732,298	.....	18,439,872	.....	19,238,659
Books and pamphlets .....lbs.	3,036,590	828,982	4,068,307	898,724	31,094,604	8,994,344	39,281,715	9,531,742
Maps and charts .....lbs.	20,848	21,477	14,224	23,902	181,212	164,932	173,212	196,631
Music in books or sheets .....lbs.	52,883	28,112	40,984	29,951	591,357	354,318	475,434	297,352
Souvenir post cards .....lbs.	33,763	15,327	160,588	28,488	339,541	177,872	536,422	221,365
Lithographically printed matter, except post cards and maps .....lbs.	258,215	136,440	346,161	187,050	2,189,585	1,773,692	3,159,921	2,024,141
Playing cards .....Packs	614,009	68,036	521,814	71,883	6,036,851	672,781	7,082,982	768,154
Other printed matter .....lbs.	1,940,986	557,985	1,366,225	492,300	16,926,492	6,301,133	17,639,446	6,199,274
WOOD PULP AND PAPER STOCK								
Sulphite wood pulp .....tons	1,760	103,919	1,897	125,663	19,265	1,169,556	20,810	1,242,927
Soda wood pulp .....tons	195	19,482	283	23,651	1,671	157,950	2,130	195,531
Other wood pulp .....tons	51	3,939	286	14,735	4,183	417,633	7,889	813,095
Rags, and other paper stock .....lbs.	6,158,586	110,773	15,750,486	383,835	106,247,675	1,835,297	164,169,552	3,081,016
PAPER AND PULP MILL MACHINERY								
Paper and pulp mill machinery.....lbs.	770,738	164,049	739,785	118,159	9,540,303	1,953,609	6,385,970	1,483,285

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JANUARY 30, 1926

SUMMARY

Cigarette paper .....60 cs.
Wall paper .....35 bls., 27 cs.
Paper hangings .....31 bls., 8 cs.
Fancy paper .....10 cs.
Printing paper .....157 cs.
Wrapping paper .....14 bls.
Drawing paper .....7 cs.
Filter paper .....9 cs.
Gold coated paper .....5 cs.
Metal coated paper .....5 cs.
Surface coated paper .....41 bls., 125 cs.
Coated paper .....25 cs.
Basic paper .....49 cs.
Fantasia paper .....1 cs.
Abrasive paper .....48 bls.
Envelopes .....2 cs.
Writing paper .....24 cs.
Tissue paper .....8 pgs., 37 cs.
Parchment paper .....6 cs.
Transfer paper .....16 cs.
Decalcomania paper .....14 cs.
Colored paper .....1 cs.
Tracing paper .....1 cs.
Paper tubes .....4 cs.
Straw board .....550 rolls
Miscellaneous paper .....231 bls., 199 cs.

CIGARETTE PAPER

Standard Products Corp., France, Havre, 60 cs.

WALL PAPER

F. J. Emmerich, Regina, Liverpool, 24 bls.
Bendix Paper Co., Chifuku Maru, Hamburg, 27 cs.
A. C. Dodman, Jr., Inc., Aquitania, Southampton, 11 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Samaria, Liverpool, 21 bls.
W. H. S. Lloyd & Co., Menominee, London, 8 cs.
W. H. S. Lloyd & Co., Menominee, London, 6 bls.
A. C. Dodman, Jr., Inc., Regina, Liverpool, 4 bls.

FANCY PAPER

Whiting & Patterson Co., Aquitania, Southampton, 7 cs.
J. W. Hampton, Jr., & Co., Aquitania, Southampton, 3 cs.

PRINTING PAPER

Marvin Co., Samland, Antwerp, 3 cs.
Perry, Ryer & Co., Transylvania, Glasgow, 44 cs.
P. Puttman, Zeeland, Antwerp, 37 cs.
International Forwarding Co., Zeeland, Antwerp, 24 cs.
P. C. Zuhlke, Zeeland, Antwerp, 24 cs.
B. F. Drakenfeld & Co., Regina, Liverpool, 25 cs.

WRAPPING PAPER

Globe Shipping Co., Zeeland, Antwerp, 14 bls.

DRAWING PAPER

Devoe & Reynolds, Menominee, London, 3 cs.
H. Reeve Angel & Co., Inc., American Shipper, London, 4 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., Menominee, London, 8 cs.
H. Reeve Angel & Co., Inc., American Shipper, London, 1 cs.

GOLD COATED PAPER

C. B. Richard & Co., Stuttgart, Bremen, 5 cs.

METAL COATED PAPER

H. D. Catty & Co., Stuttgart, Bremen, 5 cs.

SURFACE COATED PAPER

Gevaert Co. of America, Samland, Antwerp, 69 cs.
P. C. Zuhlke, Zeeland, Antwerp, 2 cs.
P. Puttman, Zeeland, Antwerp, 11 cs.
A. C. Dodman, Jr., Inc., Zeeland, Antwerp, 16 cs.
A. C. Dodman, Jr., Inc., Zeeland, Antwerp, 41 bls.
Gevaert Co. of America, Zeeland, Antwerp, 27 cs.

COATED PAPER

Globe Shipping Co., Stuttgart, Bremen, 25 cs.

BASIC PAPER

Globe Shipping Co., Stuttgart, Bremen, 49 cs.

FANTASIA PAPER

L. de Jonge & Co., Zeeland, Antwerp, 1 cs.

ABRASIVE PAPER

C. D. Stone & Co., Inc., American Shipper, London, 48 bls.

ENVELOPES

H. Reeve Angel & Co., Inc., American Shipper, London, 2 cs.

WRITING PAPER

Maurice O'Meara Co., M. Washington, Trieste, 21 cs.
Schenckers, Inc., Alberta, Trieste, 2 cs.
H. Reeve Angel & Co., Inc., American Shipper, London, 1 cs.

TISSUE PAPER

S. Gilbert, Rotterdam, Rotterdam, 3 cs.
F. C. Strype, Samaria, Liverpool, 25 cs.
Meadows, Wye & Co., Samaria, Liverpool, 9 cs.
P. H. Petry & Co., France, Havre, 8 pgs.

PARCHMENT PAPER

S. Gilbert, Rotterdam, Rotterdam, 6 cs.

TRANSFER PAPER

Sinclair, Valentine Co., Stuttgart, Bremen, 9 cs.
F. L. Kramer & Co., Columbus, Bremen, 9 cs.

DECALCOMANIA PAPER

C. W. Sellers, Stuttgart, Bremen, 11 cs.
G. Borgfeldt & Co., Stuttgart, Bremen, 1 cs.
Phoenix Shipping Co., Columbus, Bremen, 2 cs.

COLORED PAPER

H. D. Catty & Co., Stuttgart, Bremen, 1 cs.

TRACING PAPER

Freedman & Slater, Chifuku Maru, Hamburg, 1 cs.

PAPER TUBES

H. de Maguinn, Suffren, Havre, 4 cs.

STRAW BOARD

A. Vuyck, Rotterdam, Rotterdam, 550 rolls.

MISCELLANEOUS PAPER

Maurice O'Meara Co., M. Washington, Trieste, 70 bls.
Steiner Paper Corp., Rotterdam, Rotterdam, 17 cs.
J. P. Hefernan Paper Co., Tiberta, Trieste, 96 bls.
Japan Paper Co., Suffren, Havre, 19 cs.
Hensel, Bruckman & Lorbacher, Stuttgart, Bremen, 3 cs.
F. Henjes, Jr., Stuttgart, Bremen, 39 cs.
Quality Art Novelty Co., Alaska, Havre, 31 cs.
Japan Paper Co., Duilio, Genoa, 55 cs.
Perkins, Goodwin & Co., Chifuku Maru, Hamburg, 71 bls.
H. de Maguinn, France, Havre, 30 cs.
A. B. Scott, France, Havre, 5 cs.

RAGS, BAGGING, ETC.

Maurice O'Meara Co., Rotterdam, Rotterdam, 27 bls. bagging.
Mechanics & Metals Natl. Bank, Hektor, Marseilles, 150 bls. rags.
Chemical National Bank, Hektor, Barcelona, 80 bls. rags.
E. J. Keller Co., Inc., Alberta, Trieste, 98 bls. rags.
M. Snedeker Corp., Incemore, Belfast, 24 bls. paper stock.
Hughes Fawcett, Incemore, Belfast, 29 bls. flax waste.
Reis & Co., West Eldara, Antwerp, 9 bls. paper stock.
E. J. Keller Co., Inc., West Eldara, Antwerp, 9 bls. threads.
E. J. Keller Co., Inc., Carlier, Antwerp, 77 bls. rags.
The Stone Bros. Co., Inc., Samaria, Liverpool, 6 bls. rags.
B. D. Kaplan, Samaria, Liverpool, 6 bls. rags.
State Bank, Samaria, Liverpool, 20 bls. rags.
E. J. Keller Co., Inc., Stuttgart, Bremen, 73 bls. rags.
Castle & Overton, Inc., Alaska, Havre, 33 bls. rags.
Castle & Overton, Inc., Alaska, Havre, 42 bls. bagging.
E. J. Keller Co., Inc., Alaska, Havre, 35 bls. rags.
E. J. Keller Co., Inc., Alaska, Havre, 109 bls. bagging.
The Stone Bros. Co., Inc., Alaska, Havre, 92 bls. new cuttings.
The Stone Bros. Co., Inc., Alaska, Havre, 142 bls. rags.
National City Bank, Alaska, Havre, 59 bls. rags.
Garfield National Bank, Alaska, Havre, 15 bls. rags.
The Stone Bros. Co., Inc., Transylvania, Glasgow, 51 bls. rags.
Brown Bros. & Co., Transylvania, Glasgow, 91 bls. rags.
Brown Bros. & Co., Menominee, London, 17 bls. rags.
E. J. Keller Co., Inc., Zeeland, Antwerp, 78 bls. flax waste.
Cantanasano Bros., Isarco, Naples, 10 bls. rags.
Mechanics & Metals National Bank, Isarco, Naples, 317 bls. rags.
Mechanics & Metals National Bank, Isarco, Genoa, 195 bls. bagging.
E. Butterworth & Co., Inc., Regina, Liverpool, 19 bls. rags.
The Stone Bros. Co., Inc., Regina, Liverpool, 19 bls. rags.
B. D. Kaplan, Regina, Liverpool, 10 bls. rags.
E. J. Keller Co., Inc., Chifuku Maru, Hamburg, 57 bls. rags.
Darmstadt, Scott & Courtney, Chifuku Maru, Hamburg, 96 bls. bagging.
Salomon Bros. & Co., Chifuku Maru, Hamburg, 15 bls. rags.
P. Berlowitz, Chifuku Maru, Hamburg, 38 bls. rags.
E. J. Keller Co., Inc., J. I. Luckenbach, Shanghai, 593 bls. rags.

OLD ROPE

E. J. Keller Co., Inc., Alaska, Havre, 22 bls.

MANILA ROPE

New York Cordage Co., Samland, Antwerp, 142 coils.
Brown Bros. & Co., Samland, Antwerp, 52 bls.
New York Cordage Co., Zeeland, Antwerp, 135 rolls.
Ellermans' Wilson Line, Aquitania, Southampton, 30 coils.

SUNN ROPE

New York Cordage Co., Samland, Antwerp, 40 coils.

CHINA CLAY

Eagle Pencil Co., Chifuku Maru, Hamburg, 150 casks.

WOOD PULP

M. Gottesman & Co., Inc., Alberta, Sebenico, 4440 bls. wood pulp.
Bulkley, Dunton & Co., Stuttgart, Bremen, 196 bls. wood pulp.
Castle & Overton, Inc., Karin, Hamburg, 500 bls. wood pulp, 100 tons.
E. M. Sergeant & Co., Idefjord, Oslo, 108 bls. chemical pulp.
Central Union Trust Co., Idefjord, Oslo, 160 bls. sulphite pulp.
J. Anderson & Co., Idefjord, Sarpsborg, 3594 bls. sulphite pulp.
Nilsen, Lyon & Co., Columbus, Bremen, 1250 bls. wood pulp.
Johanson, Wales & Sparre, Inc., W. Blummer, Sundsvall, 6350 bls. sulphite, 1240 tons.
M. Gottesman & Co., Inc., W. Blummer, Sundsvall, 3000 bls. sulphite, 508 tons.
Bulkley, Dunton & Co., W. Blummer, Soderhamn, 550 bls. sulphite, 1100 tons.
Bulkley, Dunton & Co., W. Blummer, Soderhamn, 1875 bls. sulphate, 375 tons.
J. Anderson & Co., W. Blummer, Soderhamn, 5000 bls. sulphate, 1000 tons.
J. Anderson & Co., W. Blummer, Hernosand, 2400 bls. sulphate, 400 tons.
Bulkley, Dunton & Co., W. Blummer, Hernosand, 3000 bls. sulphite, 500 tons.
Castle & Overton, Inc., Chifuku Maru, Hamburg, 125 bls. wood pulp, 25 tons.
M. Gottesman & Co., Inc., Urter, Sheet Harbor, N. S., 16,041 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 30, 1926

E. H. Bailey & Co., Incemore, Leith, 62 cs. paper.
F. B. Vandegrift & Co., Karin, Hamburg, 4 bls. wall paper.
M. Rice & Co., Karin, Hamburg, 3 cs. crepe paper.
Paper House of Penna., Karin, Hamburg, 35 cs. paper.
Brown Bros. & Co., Karin, Hamburg, 2 bls. packing paper.
F. Weber & Co., Karin, Hamburg, 2 cs. paper.
D. I. Murphy, Karin, Hamburg, 99 bls. rags.
R. Blank, Karin, Hamburg, 35 bls. rags.
Philadelphia National Bank, Karin, Hamburg, 38 bls. rags.

(Continued on page 78)

Imports of Paper and Paper Stock

(*Continued from page 77*)

Castle & Overton, Inc., Karin, Hamburg, 525 bls. wood pulp, 105 tons.
Nilson, Lyon & Co., Karin, Hamburg, 478 bls. wood pulp, 74 tons.
Castle & Overton, Inc., ———, Germany, 1325 bls. wood pulp.
Castle & Overton, Inc., Seattle Spirit, Hamburg, 39 bls. rags.
E. J. Keller Co., Inc., Corson, Algiers, 384 bls. rags.
E. J. Keller Co., Inc., Legie, Hamburg, 642 bls., rags.
E. J. Keller Co., Inc., West Campgaw, Hamburg, 31 bls. rags.
I. Abela & Co., Alberta, Trieste, 46 bls. rags.
J. Anderson & Co., Alberta, Trieste, 4701 bls. wood pulp.
M. Gottesman & Co., Inc., Alberta, Trieste, 3360 bls. wood pulp.
New York Trust Co., Inchmore, Leith, 64 coils old rope.
The Stone Bros. Co., Inc., Alaska, Havre, 38 bls. rags.
Ayres. W. C. Jones, Alaska, Havre, 78 bls. cotton waste.
Castle & Overton, Inc., Alaska, Havre, 112 bls. rags.
E. J. Keller Co., Inc., Alaska, Havre, 262 bls. rags.
Me hanics & Metals National Bank, Alaska, Dunkirk, 420 bls. rags.
Southwark National Bank, Alaska, Dunkirk, 97 bls. rags.

NEWPORT NEWS IMPORTS

WEEK ENDING JANUARY 30, 1926

M. Gottesman & Co., Inc., Bifrost, Stockholm, 3751 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING JANUARY 30, 1926

Baltimore Trust Co., Alaska, Havre, 134 bls. rags.
National Bank of Commerce, Chifuku Maru, Hamburg, 57 bls. rags.
Castle & Overton, Inc., Chifuku Maru, Hamburg, 625 bls. wood pulp, 125 tons.
M. Gottesman & Co., Inc., Chifuku Maru, Hamburg, 1201 bls. wood pulp, 185 tons.
Castle & Overton, Inc., ———, Germany, 3475 bls. wood pulp.
Castle & Overton, Inc., Sac City, Rotterdam, 798 bls wood pulp.
M. Gottesman & Co., Inc., Halse, Stockholm, 3600 bls. wood pulp.
M. Gottesman & Co., Inc., Drammensfjord, Stockholm, 3210 bls. wood pulp.
M. Gottesman & Co., Inc., Bifrost, Stockholm, 2870 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING JANUARY 30, 1926

Castle & Overton, Inc., Seattle Spirit, Hamburg, 1000 bls. wood pulp.
Castle & Overton, Inc., Sac City, Rotterdam, 484 bls. wood pulp.
E. J. Keller Co., Inc., Napierian, Rotterdam, 14 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING JANUARY 30, 1926

Castle & Overton, Inc., West Erral, France, 158 bls. rags.
Castle & Overton, Inc., West Norranus, Germany, 333 bls. rags.
Castle & Overton, Inc., Aquarius, Rotterdam, 58 bls. rags
Castle & Overton, Inc., Aquarius, Rotterdam, 134 bls bagging.
E. J. Keller Co., Inc., Bayou Chico, Bremen, 24 bls. bagging.

Envelope Men to Meet in Chicago

The next meeting of the Bureau of Envelope Manufacturers and the American Envelope Manufacturers' Association will be held in Chicago at the Blackstone Hotel, Tuesday and Wednesday, March 2 and 3. Various matters of interest to the envelope industry have been scheduled for discussion at this meeting and a full attendance of the Bureau and the Association members has been assured. Invitations to attend have been sent to all of the non-member envelope manufacturers and several have signified their intention of attending the meeting.

The informal family dinner which is such an important feature of the meetings of the envelope manufacturers will be held at the Blackstone on Tuesday evening and the usual invitation to attend the dinner and also to attend the buffet luncheons on Tuesday and Wednesday have been extended to representatives of the various paper companies, press manufacturers, gum manufacturers and other interests related to the envelope industry.

The Bureau of Envelope Manufacturers is making excellent progress under the progressive administration of President Laurence Reineman of the Buffalo Envelope Company and several new members have recently joined the organization.

The Bureau is dealing with several matters of vital importance to the industry. One of the most important of these matters is the support which the envelope industry is extending to the job printers throughout the country in their effort to secure an ammendment to the stamped envelope law which will overcome the destructive competition which the job printers are sustaining through the Government's incursion into private business by printing return cards on envelopes.

David M. Lea & Co. To Make Containers

RICHMOND, Va., February 1, 1926.—David Lea & Co., Inc., have recently installed a new and improved Knowlton corrugating machine to make corrugated containers.

The company is one of the oldest concerns making wooden boxes in the state of Virginia, haivng traded under the same name for the past sixty years. The company was incorporated in 1919. In its new corrugated container department it will be able to supply containers for every department.

The company states that it is "Our purpose is to build up the same reputation on corrugated containers we have maintained for years in our wood box and wirebound departments. The aim of our Company has always been to serve first and to try to make a reasonable profit on our investment, after we have rendered the service to our customers."

Wax Paper Simplified Practice Committee

WASHINGTON, D. C., January 27, 1926.—Word has been received here that the American Waxed Paper Association has appointed a Simplified Practice Committee to work out a simplification for the industry. Members of the committee include W. L. Carter, W. J. Eisner, and O. M. Porter. It is understood that the association has asked the Simplified Practice Division of the Department of Commerce to cooperate with the new committee in its work.

Completing Dock at Longview

[FROM OUR REGULAR CORRESPONDENT]

LONGVIEW, Wash., January 30, 1926.—The Crown-Willamette Paper Company's dock is nearing completion. As previously stated the dock is 250 feet long. It extends between the Long-Bell Lumber Company's docks and the municipal port property. It has two cantilever trusses supporting a collector which will discharge by gravity to barges alongside.

Explosion Kills Paper Mill Employee

CAMAS, Wash., January 30, 1926.—At the Crown-Willamette Paper Company's plant on January 26, the head of a steel steam tank exploded, killing J. M. Jesson, a steamfitter who had been with the company for six years. New discs had been installed in the steam flow meter and when steam was turned into the tank they failed to stand the pressure.

To Investigate Dumping of Crepe Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 25, 1926.—The Customs Service, Treasury Department, has begun an investigation into the alleged dumping on the American market of crepe paper from Czecho Slovakia.

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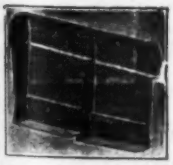

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New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, February 3, 1926.

Trading in the local paper market during the past week was fairly active and the demand for the various grades of paper continued comparatively strong. Sales organizations of the leading paper houses report that they anticipate an unusually heavy spring trade and are generally optimistic regarding the future outlook.

News print continues in good request and many competent authorities predict that the demand during the first quarter of this year will at least equal, if it does not exceed, the demand experienced in the last quarter of the preceding twelve months. Spot offerings of news print are still reported to be rather scarce and prices are generally well maintained.

Conditions in the paper board industry remain favorable and the recent advanced prices are holding and many of the printers are apparently inclined to replenish their stocks at this time. Tissues are also looking up a bit and prices are very firm. The coarse paper market exhibits a sound trend and the industry is undoubtedly in a strong position.

Mechanical Pulp

No radical changes have been reported in the ground wood market of late. Producers have been handicapped by weather conditions and, after taking care of their contract requirements, find that they have little accumulations to offer for spot business. Offerings of imported ground wood are also scarce and prices are being well maintained. Domestic ground wood is quoted at from $28 to $32 per ton, f. o. b. mill, and imported is selling at from $35 to $40 a ton, ship side.

Chemical Pulp

Imported chemical pulp continues as strong as ever. Offerings are exceedingly scarce. It is reported that 15 per cent of the Swedish output for 1927 is already sold. Foreign kraft is very strong at from 3.25 to 3.40 cents a pound, ship side, Atlantic ports, and imported bleached sulphite is quoted at from 4.25 to 4.50 cents a pound. Domestic mills are well booked ahead and prices on all the grades are practically unchanged.

Old Rope and Bagging

The old rope market is proceeding on routine lines and greater interest is expected to develop from the paper mills in the near future. Prices are holding up fairly well. The demand for baggging has improved slightly but supplies are said to be rather scarce. Prices are inclined to fluctuate a little.

Rags

Demand for domestic rags is expanding and the cheaper grades are in much better request than for some time. The inquiry for better grades, however, is rather light at present. The imported rag market is very quiet, as the result of the continued high prices being asked for foreign cuttings. How long this situation will last is problematical.

Waste Paper

Waste paper was in fairly good request during the past week and prices on most grades have continued firm. Mill demand for book stock has improved perceptibly and prices have advanced to slightly higher levels. Prices on old kraft paper are a little easier. Dealers are looking for an increased buying movement from the mills in the near future.

Twine

The twine market continues fairly steady and a revival of activity is expected at any time now that the spring trading season is approaching. Prices of most grades are well maintained at recently quoted levels.

PREPARATION OF BUDGET

(*Continued from page 73*)

ticipated differences are also stated for the remainder of the budget period. Provision is made for explaining the differences from the estimate, both those differences realized to date and those estimated for the remainder of the period. The monthly comparisons are analyzed and condensed in the New York budget department for all companies each month. This condensed summary showing the differences previously stated and the new factors since the last advice in terms of changes in balance sheet accounts, goes to the New York treasurer for his information.

Twice each month a statement is made for the treasurer which takes into account all the new factors of which we have been advised up to date on all operating companies, and gives him the latest information as to expected receipts and disbursements for the remainder of the year, for these companies. The cash picture is then otherwise revised with respect to New York office expenditures to give a completely new and up-to-date view of the cash position by months for the remainder of the year for the entire organization.

It will be seen that for information about the future cash position of the company our treasurer relies entirely upon the budget. The statements that come to him concerning future operations are the result expressed in dollars of the carefully thought-out plans and accepted policies for the entire organization. Please do not overlook the fact that while the budget culminates in a statement of estimated cash production which is of particular interest to the treasurer, it is no less a vital and integral part of the every day business of the operator and manager—something the "boss" needs in molding and shaping the future conduct of the activities under his supervision and control.

Successors to Late S. B. Griffin Elected

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 25, 1926.—The annual meeting of the Hampshire Paper Company was held Wednesday afternoon at the mill offices in South Hadley Falls. William D. Judd was elected president of the company succeeding the late Solomon B. Griffin of Springfield and Constant Southworth was elected treasurer. At the annual meeting of the Carew Manufacturing Company, William D. Judd was reelected president and Courtland B. Griffin vice-president to succeed his father and George E. Bardwell, treasurer.

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, February 3, 1926.

Considerable improvement developed in the chemical market during the week. Spot supplies were in brisk demand and a good volume of inquiries were reported for future business. Contract withdrawals are proceeding at a very satisfactory pace and prices are generally well maintained in most divisions of the chemical industry.

BLANC FIXE.—Trading in the blanc fixe market continued on rather quiet lines. A moderate inquiry for prompt delivery was experienced and prices remained steady. The pulp is still selling at from $60 to $64 a ton, in bulk, at works, and the powder at from 3¾ to 4¼ cents a pound, in barrels, car lots, at works.

BLEACHING POWDER.—The tone of the bleaching powder market continued steady and prices were well maintained. Contract withdrawals are still moving in a normal manner and the situation, on the whole, is considered promising. Bleaching powder is quoted at from $2 to $2.40 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—More activity has been experienced in the caustic soda market than for some weeks. Manufacturers state that supplies are moving to consumers in good volume. The contract business for the year has been practically closed and an excellent amount of tonnage is said to have been booked. Caustic soda is selling at from $3.10 to $3.15 per 100 pounds, at works. For less than car load lots the price is still from $3.75 to $3.91 per 100 pounds.

CASEIN.—While consuming manufacturers have been showing an improved interest in both domestic and foreign casein, the tendency has been to only take small stocks for prompt shipment. Offerings continued rather limited but prices are holding up well. Domestic casein is quoted at from 12½ to 14 cents a pound, according to grade, and foreign casein at from 13 to 13½ cents a pound, in bags.

CHINA CLAY.—Domestic china clay is proceeding along routine lines and prices are practically unchanged. Offerings of imported china clay have been rather light and spot quotations have been well maintained. Domestic washed clay is still selling at $8 a ton, at mine, and pulverized at $10 a ton. Imported china clay is quoted at from $13 to $22 a ton, ship side.

CHLORINE.—Demand for chlorine is unusually heavy. One exceptionally large order is reported to have been booked and is understood to have been distributed between several large manufacturers The contract quotation for chlorine is 4 cents a pound, in tanks, or multi-unit cars, at works, while the spot quotation rules firm at around 4½ cents a pound.

ROSIN.—The rosin market is again inclined to fluctuate. Local demand has quietened down somewhat although a fair volume of inquiries have been received. Prices are expected to advance to higher levels when the buying movement becomes more persistent. At the naval stores, paper makers grades of rosining are quoted at from $14.75 to $15.25 per 280 pounds, ship side, in barrels.

SALT CAKE.—Conditions in the salt cake market have decidedly improved. Several large Canadian mills are reported to have been filling their requirements and business generally is better than for some time. Quotations on salt cake are very firm and range from $17 to $20 a ton, in bulk, at works.

SODA ASH.—The soda ash market continues to exhibit a strong tone and the movement of contract withdrawals is proceeding at a regular rate. Contracts for the season are reported to have all been practically closed and the volume of business booked is said to have at least equalled last year's, even if it does not exceed it. Prices have been well maintained at recently quoted levels. Contract quotations, basis 58 per cent, in car lots, at works, per 100 pounds are as follows: In bulk, $1.25; in bags, $1.38; and in barrels, $1.63.

STARCH.—Mill demand for starch continues on routine lines and no great changes have been experienced in the market for some time. Prices are holding up well and no concessions are anticipated in the immediate near future. Special paper makers starch is still selling at $3.32 per 100 pounds, in bags and barrels.

SULPHATE OF ALUMINA.—The movement of sulphate of alumina to the paper mills continues on routine lines. Spot trading has been rather quiet although there are a fair number of inquiries in the market for forward business. Sulphate of alumina continues to sell at from $2 to $2.05 per 100 pounds, for the iron free, in bags, at works, in car lots, and at from $1.40 to $1.45 for commercial grades.

SULPHUR.—The sulphur market continues practically unchanged. Contract withdrawals are proceeding in a normal manner and the demand is about as large as expected at this time. A greatly increased consumption is predicted by the leading manufacturers for the current season. Sulphur is now quoted at from $15 to $16 a ton, in bulk, at mine, and at from $20 to $21 a ton, ship side.

TALC.—Steadiness continues to prevail in the talc market. Contract withdrawals are satisfactory and future prospects for the industry are considered bright. The prevailing quotation on talc continues to rule at from $16 to $18 a ton, at eastern mines, according to grade.

Business Fairly Good in Boston

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., February 1, 1926.—Despite persistent reports that 1926 is to be a so-called "hard-selling" year, local merchants appear to be enjoying a continuance of good business—a business that is normal yet satisfactory for this time of the year. So far as comparisons go January this year exceeds, in several cases, January of 1925, but not quite up to the January of 1924.

Low stocks in warehouses and mills have at last caused a slightly forced market and orders are now being placed for quick deliveries. This applies chiefly to fine grades and Kraft.

Leading merchants agree that there is no reason why business should not continue healthy as every indication points to an increasing demand for paper goods all along the line. These same merchants while agreeing that it may turn out to be a "hard selling year" say that the way to meet this situation, is by intensive selling methods. This they intend to do and in some stores sales campaigns are already under way.

The demand for fine grades for the early year have been quite satisfactory. Printers papers are in demand constantly. Writings, covers, books and coated specialties are selling well and bonds are moving on a generous scale.

Reports from the raw stock division show that business is picking up in that quarter. Mills are gradually coming in for supplies and the orders in most cases are for generous amounts.

Kraft dealers report a slight falling off in some quarters though business is better than it was a year ago, they say. The box board dealers are getting some of the good business which comes as a result of increased activities in the industrial centers.

In addition to the regular business activities there is a rather intensified drive just now to clean up some outstanding accounts and collections, while slow, are gradually coming in, a survey shows. Thus far, with one month gone, local paper dealers are satisfied that the year will be a satisfactory one. Optimism still prevails and though it is generally agreed that the business may come a little harder this year it is sure to come if the "house goes out after it."

Federal Paper Stock Co. To Build

ST. LOUIS, Mo., February 1, 1926.—The Federal Paper Stock Company has purchased 146 feet of vacant ground on the Terminal Railroad at the southeast corner of Gano and Kissock avenues from Eugenie Hughes of New York City. Plans are being prepared for a $100,000 building to be erected by the paper company.